

# *The* SHIPPING WORLD

AND SHIPBUILDING & MARINE ENGINEERING NEWS

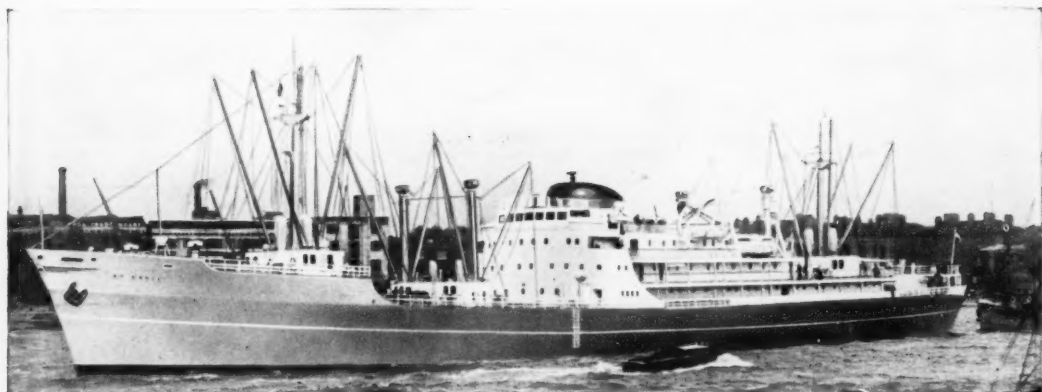


VOL. CXXV No. 3038

WEDNESDAY, SEPTEMBER 19, 1951

Price 1/6

\*\*\* *Exports and imports*



*to and from South America*

MODERN GENERAL CARGO LINERS OPERATE FAST  
REGULAR SERVICES TO AND FROM THE UNITED KINGDOM, THE CONTINENT  
AND BRAZIL, URUGUAY AND ARGENTINA VIA CANARY ISLANDS



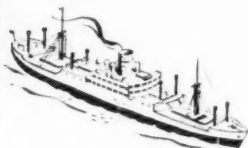
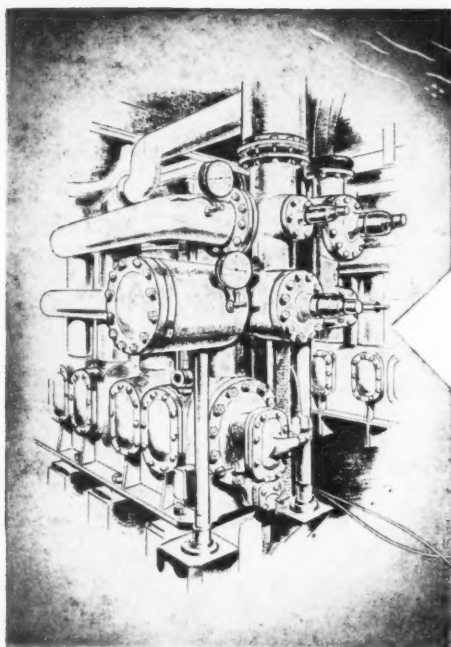
***THE SOUTH AMERICAN SAINT LINE LTD***

HEAD OFFICES: SAINT LINE HOUSE, CARDIFF

LONDON ..... The South American Saint Line Ltd., 81/82, Leadenhall Street, E.C.3

HULL ..... Wm. Brown, Atkinson & Co. Ltd., Roland House, Princes Dock Sid.

Agents also at: BIRMINGHAM • GLASGOW • LIVERPOOL • ANTWERP • COPENHAGEN • HAMBURG  
ZURICH • CANARY ISLANDS • NEW YORK • RIO DE JANEIRO • MONTEVIDEO • BUENOS AIRES



## A Clensol-clean plant means quicker turn-rounds

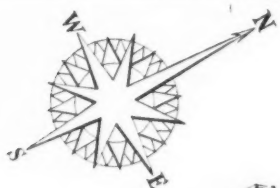
The Clensol System of Chemical Descaling cleans steam and cooling plant in a fraction of the usual time; avoids frequent overhauls and ensures efficient operation of boilers, evaporators, condensers, and diesel engine cooling systems. Contractors to the leading shipping companies, with service available at all principal ports.

**Clensol**  
Descaling, Degreasing, and  
Water Treatment Services



CLENSOL LTD., Descaling Degreasing and Feed Water Treatment Engineers, 169 PICCADILLY W.1

Telephone: REGent 4521



# COAL

**At all points of  
the compass**

COAL stands for Power. Once the stately but slow clipper brought us merchandise from the Orient. Now, except where the native plys his trade up and down the rivers, steam-ships have superseded sail.

Since the earliest days of steam, Mann, George & Co., and Associated Companies, have been engaged in the shipment and distribution of COAL overseas.

Telephone: ROYAL 2500

**MANN, GEORGE & CO. LTD.**

HEAD OFFICE

CORY BUILDINGS FENCHURCH ST. LONDON, E.C.3.

**These people depend on Coal to transport  
their merchandise to all parts of the World . . .**



# *the KANCO* *'G' Type* *Electric Hammer* *for* *ship scaling*

Ruggedly constructed and well balanced, the new "G" type Electric Hammer is suitable for many types of ship scaling whilst at sea and in port. The Hammer uses the ship's lighting circuit and consumes only 315 watts.

Very little manual effort is required to operate the Hammer, which is so designed that it cannot be overworked by the application of too much pressure. Special tools are available for scaling work.



A Special Ship Scaling Kit of Tools can be supplied with each "G" hammer.

This consists of:

1" — 1½" — 2" Scaling Chisels,  
Bull Nose Scaling Chisel and  
Ribbed Scaling Head & Holder.

## **KANCO**

### *Electric Hammers Ltd*

MORDEN FACTORY ESTATE, LOMBARD ROAD, S. WIMBLEDON, S.W.19

Telephone: Liberty 4253-5

Telegrams: Kangolim, Southphone, London

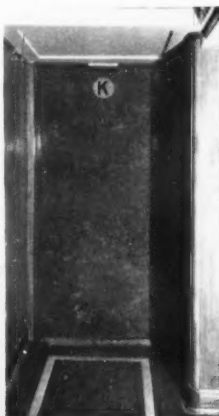
AGENTS THROUGHOUT THE UNITED KINGDOM



Any reasonably advanced student of mathematics should be able to point out the unsound reasoning which produces the impossible result shown above.

There's nothing unsound about the reasoning which prompted the choice of Kleenflush

★ **tested** Firescreen Doors for such an imposing list of luxury liners as that printed below:—



Queen of Bermuda, Dominion Monarch, Awatea, Rangitira, Angola, Apapa, Accra, Orion, Orcades, Strathaird, Strathnaver, Stratheden, Strathmore, Nova Scotia, Newfoundland, Caronia, Mauretania, Aureol, Ocean Monarch, Kenya Castle, Provence, Rhodesia Castle, Patricia, &c.

Kleenflush Doors have flat surfaces, and fit admirably into any architectural or decorative scheme for ships.

★ KLEENFLUSH Firescreen Doors are approved by the International Convention for Safety of Life at Sea, 1948, after Official Test.

## DREADNOUGHT

FIREPROOF DOORS (1930) LTD

26 VICTORIA ST., WESTMINSTER, S.W.1.

Telephone ABBey 1411

## THE PORT of MANCHESTER



MANCHESTER COTTONS—YORKSHIRE WOOLLENS—SHEFFIELD CUTLERY—BIRMINGHAM HARDWARE—THESE AND MANY OTHER INDUSTRIES ARE CONCENTRATED IN AN AREA WITHIN 75 MILES OF THE PORT.

### ALL IMPORTERS & EXPORTERS

IN THIS GREAT MANUFACTURING AREA SHOULD CONSIDER THE ECONOMICS AND CONVENIENCE OF USING THEIR

### NEAREST PORT

- EVERY SHIP'S BERTH Rail and Road connected.
- EXTENSIVE Warehouse and Open Storage accommodation.
- THROUGH RATES inclusive of ship canal toll quoted.
- COAL and OIL BUNKERING, graving docks and pontoons.

### SITES FOR WORKS

Near the Manchester Docks and along the Ship Canal there are excellent sites with deep-water frontage—accommodating ocean-going Ships—with rail, road and inland waterway connections.

FOR PARTICULARS CONCERNING THE PORT APPLY TO THE  
**MANCHESTER SHIP CANAL COMPANY,**  
KING STREET, MANCHESTER.

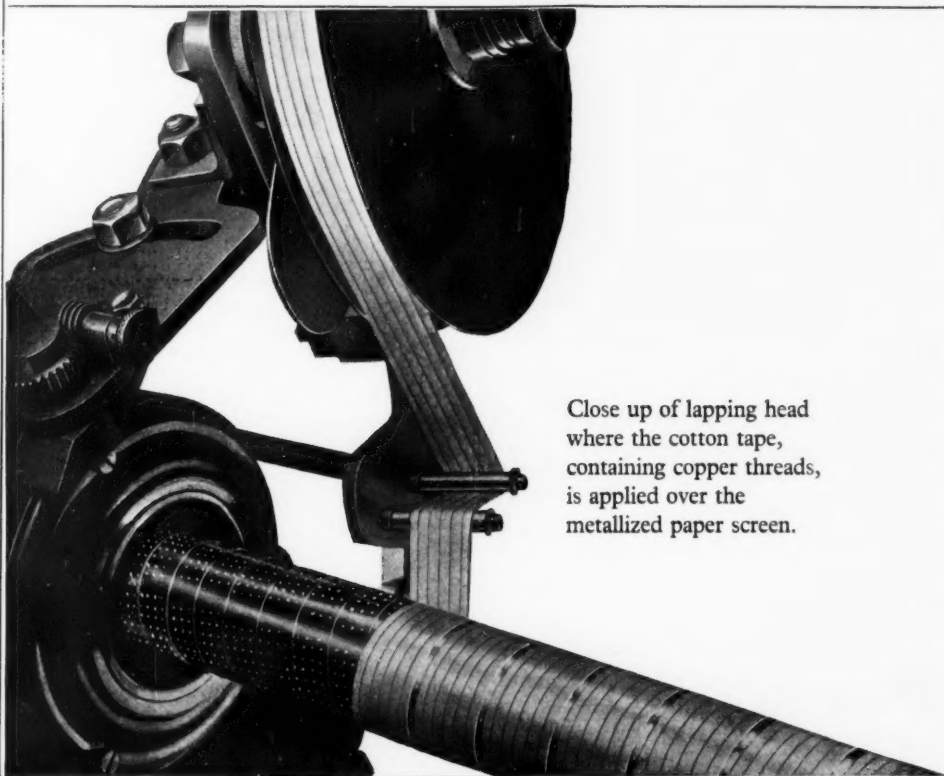


## ONE SURE FACT ABOUT CABLES

**If you** need cables of any type, in any quantities, for any installation, be sure of *one* thing: if you choose to deal with any firm listed below you will know for certain that the standards of design and quality are the highest possible, because they are standards set, rigorously kept and constantly reviewed by C.M.A.



## AND ONE OF THE MANY FACETS OF CABLE MAKING:



Close up of lapping head where the cotton tape, containing copper threads, is applied over the metallized paper screen.

# C.M.A.

### MEMBERS OF THE C.M.A. & AFFILIATED MANUFACTURERS' ASSOCIATIONS

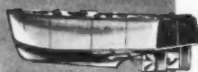
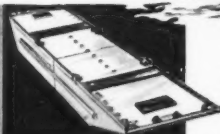
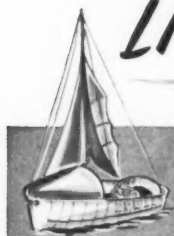
- |   |   |
|---|---|
| British Insulated Callender's Cables Ltd. | Liverpool Electric Cable Co. Ltd.                                   |
| Connollys (Blackley) Ltd.                 | Metropolitan Electric Cable & Construction Company Ltd.             |
| The Craigpark Electric Cable Co. Ltd.     | Pirelli-General Cable Works Ltd.                                    |
| Crompton Parkinson Ltd.                   | (The General Electric Co. Ltd.)                                     |
| Enfield Cables Ltd.                       | Siemens Brothers & Co. Ltd. (Siemens Electric Lamp & Supplies Ltd.) |
| The Edison Swan Electric Co. Ltd.         | St. Helens Cable & Rubber Co. Ltd.                                  |
| Greengate & Irwell Rubber Co. Ltd.        | Standard Telephones & Cables Ltd.                                   |
| W. T. Glover & Company, Ltd.              | The Telegraph Construction and Maintenance Co. Ltd.                 |
| W. T. Henley's Telegraph Works Co. Ltd.   |   |
| Johnson & Phillips Ltd.                   |   |

CABLE MAKERS ASSOCIATION 52 54 HIGH HOLBORN, LONDON, W.C.1. TELEPHONE: HOLBORN 7633

## MARINE PRODUCTS IN

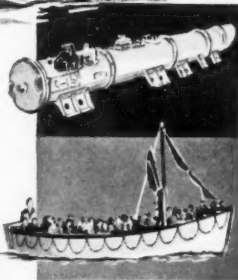
LIGHT

ALLOY



Builders of Marine Craft since 1830  
Saunders-Roe now specialise in the  
design and construction of light  
alloy vessels and marine products  
of all descriptions.

Contractors to the Admiralty and Ministry  
of Supply.



**SAUNDERS**  **ROE**  
(ANGLESEY) LTD

MARINE AND GENERAL ENGINEERING DIVISION

**BEAUMARIS**  
**ANGLESEY N. WALES**

Telephone: BEAUMARIS 130

Telegrams: SEAROADS, BEAUMARIS

Code: BENTLEYS

**What is their commercial standing?**

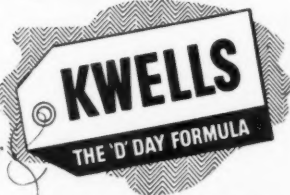


THE WESTMINSTER BANK can, in many cases, give you an immediate reply; or, if the required information is not already available in the extensive and up-to-date records of the Foreign Branch, it can very quickly be obtained. The provision of reliable confidential information as to the reputation of your prospective overseas customers is part of a comprehensive service which the Westminster Bank provides for those who trade abroad. This service is described in a booklet which can be obtained without charge at any branch. Ask for *The Foreign Business Service of the Westminster Bank*.

**WESTMINSTER BANK LIMITED**

**When are you sailing?**

How  
sickening  
if you  
forgot your



**PREVENT TRAVEL SICKNESS**

1/6 from all Chemists and sold in the ship's shops of 37 leading passenger lines.

**EAGLE AVIATION LTD.**

**draws the attention  
of shipowners**

**to their fleet of four Avro York aircraft.**  
**These aircraft are ideal for crew movements**  
**also for the transport of ships' spares.**  
**Maximum economy - Maximum speed.**

Head Office:

**29 CLARGES STREET, LONDON, W.I.**

Tel: GROsvenor 6411 Cable: Speedlode Audley, London.



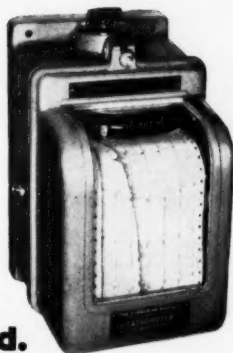
# "SUBSIG" FATHOMETER

Echo-sounding Equipment

for

## INSTANTANEOUS SOUNDINGS

This equipment, which is produced by specialists since 1914 in depth-sounding gear, ensures accurate, rapid, and continuous determination of depth of water under the keel—simply by operating a switch. It is easy to maintain and very compact.



## PERMANENTLY RECORDED

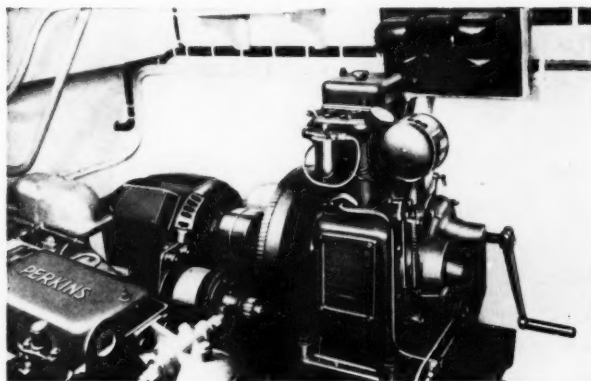
Recordings are clear, permanent. They are made on strong, **dry** paper and cannot fade. The previous hour's soundings can instantly be referred to, and when this continuous profile of the sea bed is compared with the chart it provides an indispensable aid to navigation.

## The Submarine Signal Company (London) Ltd.

Head Office : SHAKESPEARE STREET, WATFORD, HERTS.

Telephone : WATFORD 7241 (6 lines).

Telegrams : SUBMARINOS, WATFORD



## A RANGE OF ENGINES UNSURPASSED FOR ECONOMY AND MAXIMUM RELIABILITY

**E**ASY Starting, smooth running, economical, 4-stroke marine diesel and petrol propulsion engines, and auxiliary power sets, carrying a maker's guarantee and backed by fifty years' experience.

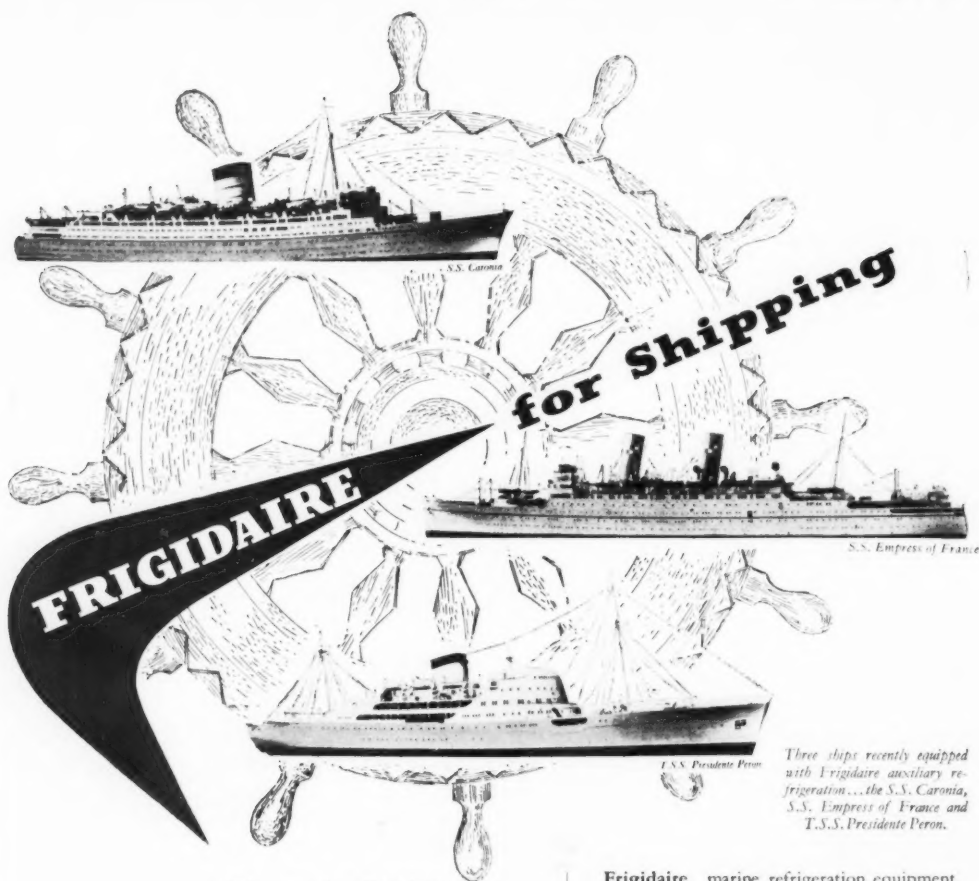
**T**he Engine Room of the Vosper built Motor Yacht "Patsey Anne". Electricity Generating by a 5/7 H.P. Coventry Victor Diesel Engine plant. A similar set is installed in the Vosper built Motor Yacht "Viking".

COVENTRY  
**VICTOR**

Send for Catalogue 56

## FOUR-STROKE MARINE ENGINES

The COVENTRY VICTOR MOTOR Co., Ltd.  
MARINE DIVISION  
COX STREET, COVENTRY.



When you buy Frigidaire

equipment you are buying the latest and finest products of over 30 years' refrigeration experience. Fine materials and expert craftsmanship go to the making of a Frigidaire. The result is a product which gives reliable, trouble-free service . . . in any climate and under all conditions.



*The Cold Room in the Butcher's Shop . . . one of the 13 Frigidaire plants aboard the T.S.S. Presidente Peron.*

**Frigidaire** marine refrigeration equipment has these advantages :—

- ★ *It is easily installed and highly economical to run.*
- ★ *It is designed specifically for marine usage.*
- ★ *It is installed by skilled engineers of accredited Frigidaire Dealers.*
- ★ *Frigidaire craftsmanship and experience ensure its long life and supreme reliability.*
- ★ *Frigidaire service and parts are available in almost every country and port in the world.*

For further information and advice consult your local Frigidaire Dealer or write direct to Frigidaire.

**You can't match *FRIGIDAIRE***

MADE IN BRITAIN BY FRIGIDAIRE DIVISION OF GENERAL MOTORS LIMITED  
STAG LANE, KINGSBURY, LONDON, N.W.9. TELEPHONE: COLINDALE 6541

# The SHIPPING WORLD

AND SHIPBUILDING & MARINE ENGINEERING NEWS

The Oldest Weekly Journal devoted to Shipping, Shipbuilding,  
Marine Engineering, Shiprepairing, Insurance and Finance

FOUNDED



1883

Chairman and Managing Director of The Shipping World, Ltd.:—SIR ARCHIBALD HURD

Editor:—PETER DUFF

Managing Editor:—RONALD KENDALL, M.C.M.S., A.M.I.N.A.

Advertisement Manager:—M. B. FIELD

Annual Subscription 70s.

Head Offices: 1, Arundel Street, London, W.C.2. (Temple Bar 2523)  
Telegrams: "Shipping World," London

Northern District Manager: W. S. Wilson, M.I.E.E., 27 Exchange  
Buildings, Newcastle-on-Tyne. Telephone: Newcastle 27078

Vol. CXXV.

WEDNESDAY, SEPTEMBER 19, 1951

No. 3038

A Challenge to the Maritime Industries	187	Transatlantic Passenger Liner "Rijndam"	195
Current Events	187	Officers' (Merchant Navy) Federation	197
On the "Baltic"	190	New Ship from Two Wrecks	198
Yugoslav Seaborne Traffic	191	Round the Shipyards	199
Ceylon Shipping Corporation	192	Recent Technical Developments	199
Coal and Oil	193	Pictures	200
Official Notices	193	New Contracts, Launches, Trial Trips	201
Eso Refinery at Fawley	194	Maritime News in Brief	202

*...in the days before steam...*



... when the "uncertain winds of heaven" afforded the sole means of propulsion, the duration of a ship's voyage was largely a matter of chance.

Today a steamship's performance is determined by her designers, and her consistent achievement ensured by their choice of the best boilers and propelling machinery.

MeLeSCO Superheaters are contributing to the efficiency and reliability of many naval, mercantile and fishing vessels of British and other ownership.

*The* **SUPERHEATER**  
Company Ltd

53 HAYMARKET, LONDON, S.W.1

Works: TRAFFORD PARK, MANCHESTER, 17

BA 36





**H&W**

R.M.S. "KENYA CASTLE"  
(Union-Castle Mail S.S. Co. Ltd.)  
17,300 gross tons

**HARLAND AND WOLFF**

***large passenger liners***

**BELFAST GLASGOW LONDON LIVERPOOL SOUTHAMPTON**



THE SHIPPING WORLD

## THE CHALLENGE TO THE MARITIME INDUSTRIES

A PEACE treaty with Japan has now been signed and that will be followed by a treaty with Germany. These treaties will mark the end of a period of six years when the flags of these two countries have been absent from the trade routes and neither has been free to engage in shipbuilding. Competition in shipping and shipbuilding will again be keen. It will once more be world wide. The shipowners and shipbuilders of this country will have to be on their toes if they are to hold their own against rivals who will enjoy no mean advantages over them. It is true that freights at present are relatively high, a condition due, at least partially, to the war in Korea, and the larger berths in the shipyards of Britain and Northern Ireland are booked up for four or five years. But it would be unwise to assume that because things are going well at the moment, the re-entrance of Japan and Germany into the maritime sphere will make little difference. It will, in fact, change the whole outlook of every industry in any way associated with ships. For the workers of both these ex-enemy countries have less regard to hours of labour than is the case in these islands; they have never adopted such restrictive practices as are still in force with us; and they are content with lower wages. They may, and probably will, judging by past experience, resort to various financial devices which will tend to increase their competitive power.

The danger to this country lies in the fact that Ministers are not ship-minded, nor are the majority of Members of Parliament. The Chancellor of the Exchequer, as his speeches reveal, can see no difference between the importance to an island community of ships and motor cars and, consequently, the same burden of taxation is placed on the maritime industries, which are our lifeblood, as on other industries. In the memorandum on taxation which the General Council of British Shipping has drawn up, Mr. Gaitskell's mistaken views are effectively exposed. It may be hoped that he will, at least, study a summary of that document and reach the conclusion that, contrary to the opinions which he has expressed in the past, the maritime industries are in a class apart and that, in view of the increased competition which is developing,

he, as the guardian of the public purse, cannot afford to ignore their claim for special consideration, if only because they contribute about £150,000,000 each year to our exports. It may also be hoped that the leaders of the trade unions will not close their eyes to the writing on the wall. The Chancellor, as well as trade union leaders, has been warned that the drain which is being imposed on the resources of the shipping industry by taxation "is imperilling the future capability of the industry to perform this essential duty."

That is a text on which we trust some M.P.s will preach badly needed sermons when the next Budget is under discussion. It sums up the case of all the industries which are concerned with the building, equipment and management of British shipping, from the mines, where the coal for steel-making is hewn, to the completed vessel competing for freights on the trade routes of the world, not only without protection but, in many cases, exposed to various kinds of flag discrimination and nationalism as applied to shipbuilding and marine engineering. Sir Amos Ayre remarked in his James Watt Lecture, earlier in the present year, that it was not easy to forecast the future, but it was, he declared, clear that world competition for shipping and shipbuilding would be keen, perhaps keener than that experienced before 1939. "To maintain a large shipbuilding industry in the United Kingdom will, therefore, more than ever require a continuous urge for efficiency in every direction and by all who depend on it for their livelihood." The Chancellor of the Exchequer may not realise it, but events in all parts of the world are challenging the nation to take every practicable measure to preserve its birthright. The merchant fleets of this country are deteriorating, owing mainly to age, and shipowners have not the money to build sufficient new ships. Unless taxation relief is given, they will continue to deteriorate, with consequent reactions on the shipyards. Shipowners and shipbuilders are prepared to accept the new challenge if only the Chancellor will give them his essential aid, as was, indeed, proposed on the eve of the last war.

## Current Events

### Waste of Tonnage

FROM TIME to time, we have published in these columns statements as to the advantages to be obtained by building ships of higher speeds and improved equipment. On paper, the figures have suggested that the shipowner who ordered tonnage which was more efficient in these respects was showing enterprise which would meet with its appropriate reward, in spite of the increased shipyard prices. But Sir Ernest Murrant has produced more evidence to prove how misleading many erudite calculations may be in practice. The

experience of the Furness, Withy group is that of all owners engaged in the ocean trades. He has revealed that in the group's last financial year its ships were idle for no fewer than 1,299 ship-days in various ports of the world through industrial disputes or kindred occurrences, resulting in out-of-pocket expenses—that is sheer waste—of no less than £395,000, quite apart from the loss of earnings. Of course, that is not the whole story because ship-days were frittered away owing to the slow working in docks, repair works, engine works and elsewhere. The inflationary effect of

such delays, multiplied as they must be when applied to all British shipping engaged on the trade routes, is incalculable. Producers and consumers, including the weekly wage earners, are the victims of this crazy business. It is one of the most remarkable signs of the stupidity of trade union leaders that they seem not to realise that delays have to be paid for and that their members, in varying degrees, have to meet the bill. The waste appears to be increasing rather than decreasing month by month. Shipowners have directed attention to the matter for months past, but without effect. Trade unionists and Ministers refuse to deal with the facts, but continue to indulge in idle dreams about profits and subsidies and what not, in spite of the warnings which have been given to them. If the leading trade unionists would act firmly, educating their members, the waste which is now going on would cease and they would all be better off.

### A Tramp Stabilisation Scheme

DURING RECENT months the situation in tramp freights has certainly not been unsatisfactory, as a glance at the Chamber of Shipping Index will indicate. It is all the more encouraging, therefore, that it is at this relatively good time, rather than in the middle of a slump, when it is too late, that something should be done to secure a degree of stabilisation in the tramp section. It was revealed in the Chamber of Shipping report for the year 1950-51 that very careful consideration had been given to the subject by the Deep Sea Tramp Cooperative (1950) Committee, under the chairmanship of Mr. H. G. Mann, the committee having met frequently to determine how best to revise the 1945 Cooperative Pool Scheme and how and when the cooperation of other interests should be secured. In November last a scheme was prepared and submitted to the full deep-sea tramp section, and it was generally agreed that it provided a basis for cooperation among owners. A postal vote confirmed the section's support for the committee's recommendation that an association be formed which would not, however, commit the industry to launching the scheme. It is now announced that a company, limited by guarantee without share capital, has been formed under the title of the Tonnage Stabilisation Association, Ltd., with the objects of compensating members of the company on the mutual principle against losses in shipowning or in connection with ship operation, and with the further objective of carrying into effect a tonnage stabilisation scheme on the mutual principle. The management will be vested in a committee to consist of not less than seven and not more than 25 members. The names of 23 subscribers have been given, all being well known in the world of tramp shipping, and it has been reported that the Bristol Channel, Durham and Yorkshire, London, Mersey, Scotland, and Tyne districts will have the right to nominate members to the committee. There can be no doubt of the value of such action at the present time and in the changed industrial and political conditions of the postwar years.

### Shipbuilding Out of Balance

THE LATEST figures of shipbuilding in this country are significant, showing as they do that, owing to a variety of circumstances, attention is being devoted to tankers rather than dry cargo ships. According to the Admiralty return just issued, 1,008,000 tons gross of tankers, excluding those of less than 1,600 tons, were under construction when the statistics were prepared in July and more than half—587,000 tons gross—were for export. On the other hand, non-tanker tonnage which was then in hand amounted to only 718,000 tons gross, of which only 92,000 tons were for export. If this disproportion in output of tanker and non-tanker tonnage continues, the dry cargo fleets of this country will decline, as leading shipowners have repeatedly warned Ministers. The oil industry provides, of course, a great deal of employment in this country and we must have oil and ships to carry it. But it is arguable

whether any development of oil importation can offer adequate compensation for the loss of coal exports so far as our trading account is concerned. In any event, if we are to hold our position on the trade routes, we must replace each year the passenger ships, cargo liners and tramps as they become inefficient by reason of age or other cause. We must either carry our dry cargoes ourselves or pay other countries to do so. Shipping is an international industry on a competitive basis. It has no protection of any sort or kind. It is in these circumstances that it has held its own in the past. The present situation, in view of the warnings of the General Council of British Shipping, should be giving the Chancellor of the Exchequer a bad headache, but he is apparently in perfect health, living from day to day in the Miesow spirit and hoping that something will turn up so that he may not lose the invisible exports which shipping supplies.

### The Replacement Problem

DISCUSSION of financial problems looms large in the statement by Sir Ernest Murrant which accompanies the Furness, Withy report for the year to end-April last. At the close of that period cash, bills and tax certificates totalled £6,311,000, while quoted securities had a book value of £4,620,000 and a market value usefully exceeding that sum. On that same date, reserves aggregated £6,756,000, or more than the issued ordinary capital of £6,000,000. At first sight, therefore, the group would appear to have little to worry about on the score of financial strength. But these impressive figures of reserves and liquid resources must not be considered in isolation. The group has a very large fleet replacement programme in hand, commitments on account of which totalled £5,106,000 at April 30 last. A conservative distribution policy has enabled the company to replace war losses and to write down the fleet to a modest value. The year-end book figure for shipping property and payments on account of new tonnage was £19,825,000. At today's prices cost values considerably exceed that amount—among the past four years alone £11,619,000 has been written off prime cost, including transfers from the fleet replacement reserve—but as Sir Ernest Murrant stresses, there is no easy comfort to be derived from study of the balance sheet figures. The group has an apparent and continuing liability of the order of £3,500,000 per annum for new vessels based on the current cost of construction. And that shows little sign of early fall. Rather, with the higher price of steel recently announced, costs of new building are more likely to rise than to decline. The replacement task before the Furness, Withy group and, indeed, the task confronting all shipowners, is immense. It is made all the more difficult by an excessive level of taxation. Tax (current and future) took £1,505,000 of the group's profit of £3,021,000 after depreciation of £1,969,000, while the taxation equalisation account totalled £3,490,000 at the financial year-end. Both to meet capital and trading commitments and to satisfy the greedy claims of the Exchequer, the Furness, Withy group needs a large reservoir of liquid resources. Yet a larger dividend could have been paid, without strain, than the 9½ per cent which is the company's standard under the White Paper control proposals. It is small wonder that the chairman should describe these proposals as "merely another political expedient." The trading outlook of the shipping industry is good. Gross earnings are running at a high level. Conference and tramp rates have risen but so, too, have costs, so that net results are no more than economic and, after tax, leave all too little for the financing of fleet replacement.

### Booms and Slumps

CONSERVATIVES of the Northern Area have issued a pamphlet setting out a number of proposals by means of which they hope alternate slumps and booms will be prevented. They urge that demand in the industry must be controlled so that the yards are not full of work at one period and empty at another. It is hoped

by this means to assure continuity of employment for the workers. Their suggestion is that a permanent council, representative of shipbuilders, shipowners and trade unions, should be established to act in an advisory capacity. They favour, of course, a reduction of taxation in the shipbuilding industry to allow profits to be ploughed back for new and better plant and have approved a scheme of financial encouragement to shipowners (possibly on the principle of the scrap-and-build policy of the late 'thirties) which would give Britain a new merchant fleet every 20 years. They do not shirk the problem of demarcation. Over-specialisation of labour within the shipbuilding industry, they claim, must end, because it puts up the cost of a ship. A guarantee of employment, preferably by the industry itself, would, in their opinion, go a long way to overcome the suspicions of the shipyard unions. It is very desirable to smooth out the flow of work from month to month, but whether the suggestions made would succeed in this aim is, at least, open to doubt. Apart from many other considerations, full employment depends on 25 per cent of the labour being engaged in overseas work and a fair demand by the Admiralty, which is very spasmodic. The Conservatives should think again, and should not in any case deal with a vital and national industry on a regional basis. Shipbuilding prosperity depends fundamentally on a complete and adequate maritime policy, which has yet to be formulated.

### Sir Henry Grayson's Retirement

A NOTABLE FIGURE in the industrial world has retired. Sir Henry Grayson has been associated with Merseyside all his life and now, at the ripe age of 86 years, he has handed over to his son, Mr. Denis Grayson, the control of a firm which has a history of about 200 years. Sir Henry can look back on a career of distinguished service in peace and in war. He sat for several years in the House of Commons and was M.P. for Birkenhead West when the Kaiser's war opened. He became, by reason of his ability and experience, a member of the Shipbuilding Advisory Council and served as Honorary Director of Ship Repairs at the Admiralty from 1916 to 1919. In recognition of his services he was made a baronet. He must be one of the oldest members of the Institution of Naval Architects, of which he has been a member since 1888, and more recently he became a liverman of the Worshipful Company of Shipwrights. Though Sir Henry has had a busy career industrially as well as politically, he has found time for sport and was once well known as a cricketer. He has, indeed, led a very full life and he carries with him into his retirement the best wishes of his many friends in all parts of the country. It is such men who have been the architects of this country's prosperity in the past and, if Socialism is to check their enterprise and limit their activities, it is certain that British industry will be unable to hold its own in world competition, for the race is becoming faster even than before the war, as events in coming years will prove.

### The Seamen's Case

THE POSITION of trade union leaders, like Mr. Tom Yates and his colleagues of the National Union of Seamen, is not an enviable one in view of the movement on the part of other societies to claim higher wages, as though this country had made a fortune out of the recent war instead of having lost one. Owing to the weakness of the Government, in alliance with the T.U.C., the policy of wage restraint has been abandoned. A race for bigger pay packets is in progress. What are far-sighted leaders to do since Ministers, with their eyes on a coming General Election, are afraid to face the facts? The Chancellor of the Exchequer has had the courage to warn the Socialists that "we cannot say honestly that high profits have been an important cause of the rise in the cost of living," and that is, of course, the hare which

his party is now running. His caution will no doubt be ignored as well as his plea for improved production—more goods and services at lower cost. But the N.U.S. is not following in the queue, but is taking a line of its own, which will have much the same effect as a claim for higher wages would have. In the current issue of *The Seaman*, issued on the eve of a meeting of the National Maritime Board, Mr. Yates states that he is not without hope that the claim for a reduction of the present average stretch of 56 hours a week will be met by the shipowners. It is, he remarks, one of the Seattle conventions and must be honoured. "It is true that the shipowners have from time to time emphasised the difficulties of applying the principle of the 48-hour week, for instance in the coastal rather than the monthly trade." It is true, too, he admits, that with the recognition of double pay for Sundays, all sections of the industry have in principle the 48-hour standard working week. But he claims that the shipping industry, in the nature of the case, must adjust its standard of working hours on different lines from those of industries ashore, and, he adds, members can rest assured that in all sections, in big ships and small, they will strive to get a workable scheme based on the 48-hour principle. He also reveals that the union is to seek an all-round increase in overtime rates for all personnel in the deck and engineroom departments and the catering section. As to wages, Mr. Yates promises that the negotiating committee will take the matter as far as it can and make out the best case for a general wage advance, "having regard to the existing economic situation and the line of policy enjoined upon the trade unions generally by the T.U.C."

### Television of Underwater Objects

IN THESE days when international affairs are so strained and Britain's part in them not perhaps so impressive as has been the case for generations, it is refreshing to learn of instances where the ingenuity and ability of our technicians place us once more in the lead. There have been several such instances, including many in new fields of enterprise like gas turbine design and construction, but the latest example is the use by the Royal Navy of television apparatus in locating the lost submarine *Affray*. It was revealed last week that immediately following the loss of the submarine a team of four members of the Royal Naval Scientific Service worked night and day for three weeks to produce the unit which eventually proved to be of such great service. The Admiralty has paid tribute to the prompt cooperation obtained from the Marconi Wireless Telegraph Company, which provided portable television equipment similar to that used for outside broadcasting. The naval scientists not only had to mount the camera in a specially welded watertight container but also had to design and incorporate the various remote controls for operating the set. The container was placed in a specially designed frame along with underwater lighting apparatus which had previously been devised to facilitate photography. The equipment was installed in the salvage ship *H.M.S. Reclaim* and tests showed it to be satisfactory. The equipment was used for some weeks before success was achieved as a number of wrecks already located by Asdic equipment had to be investigated. The equipment proved of great value to the divers, particularly in assisting them to be lowered into the best position for surveying or otherwise working on the wrecks. The climax to the operations came when the viewers in the captain's cabin saw the name *Affray* on the screen, and the principles followed by the Naval scientists and the Marconi company were so dramatically justified.

### WORDS OF WARNING

You cannot help the poor by destroying the rich.  
You cannot strengthen the weak by weakening the strong.  
You cannot further the brotherhood of man by encouraging class hatred.

You cannot keep out of trouble by spending more than you earn.

—Abraham Lincoln



# ON THE "BALTIC"

THE COAL AND GRAIN CHARTER MARKET

By **BALTRADER**

THE DETERMINATION of the American authorities to establish a lower rate for E.C.A. cargoes of coal to Europe has been evident for some time. So much pressure was brought to bear on the charterers that business was held up and unfixed vessels began to accumulate. At length owners became anxious to cover and fixtures were arranged from Hampton Roads to Antwerp or Rotterdam at the official National Shipping Authority rate of \$10.50 per ton for loading this month. In some cases "Warshipvoy" terms were agreed by the charterers, the conditions of this charter being more favourable than the American Welsh form normally employed in commercial transactions. The new rate shows a considerable decline from freights recently obtainable for the same destination, say \$12.50 to \$13 for early loading. Expectation of securing the latter has attracted a large amount of tonnage, mostly of other flags than British, and this market is obviously weaker for prompt tonnage.

Owners, however, are not of the opinion that there will be any lack of trans-Atlantic freights even if the British Government will manage somehow without importing coal from the U.S.A. Grain is expected to require a large amount of shipping to move the big supplies of American and Canadian wheat and other cereals to the European market. The Ministry of Food does not appear to require much tonnage to bring wheat to this country from the St. Lawrence for some weeks to come. The main reason is probably the lack of storage space; it will be remembered that the carrying out of charters arranged earlier in the season from the St. Lawrence to the U.K. has been postponed in some cases. This was partly owing to delays in delivery of the cargo at the loading ports and partly on account of the difficulty in disposing of the wheat in this country. The delayed shipments have, no doubt, to be made before fresh commitments on a large scale are desired. On the other hand, as the end of the season approaches, owners expect an active demand for ships to load in the St. Lawrence for the United Kingdom, Eire, Brazil and Continental countries are already in the market for Canadian wheat in considerable quantity for all positions to the end of the season.

## Conditions in U.K. Ports

The chaotic state of things in the principal British ports is a factor to be taken into account in attempting to guess how the freight market will behave in the coming months. Detention seems likely to grow like a snowball as more and more vessels arrive and wait for discharging berths. The timber season has reached the hectic stage when numerous vessels are being chartered and loaded in an attempt to carry home our purchases before the ice begins to form. In London we are short of warehouse space, grain elevators, lighters and men; it must be said that in some easily proved cases the men are showing little sense of the national importance of their vocation. Some of the rules under which they work are also such as to add to the deficiency of the port caused by restriction of capital expenditure. For example, when discharge of a hold is finished, a gang may not be moved to another although their shift is not completed. It is not surprising that so many owners prefer to bring cargo to foreign ports rather than to the United Kingdom. They prefer to see their 10,000-ton vessels discharged and away while they would have still been awaiting orders for a discharging berth at a U.K. port. The delays which are rife in our principal ports, and which seem likely to increase, will remove a large amount of tonnage from active trade. It will make it proportionally difficult for charterers in many trades to fill

their requirements. It is seldom now that the liner companies are not open for tramp tonnage, particularly of the better class with delivery at home ports; they offer good rates on time charter to compete with the attraction of the North American cargoes.

The market homeward from the Mediterranean has been through a quiet phase of some duration, in the course of which rates have fallen appreciably. At the same time, outward coal cargoes for that area have dwindled and in fact, almost ceased in the case of British coal. This has reduced the amount of handy or medium tonnage heading for the Mediterranean, while ships both large and small have received strong inducement to fetch timber from the Baltic, White Sea and Canada, or grain and other cargoes from North America. The charterers for Mediterranean ore, pyrites, phosphate and esparto have lately found that available ships are few and rates becoming firm.

## The Freight Market

There has been plentiful inquiry for transport of coal from the United States to Europe, South America and Japan. A number of fixtures have been arranged from Hampton Roads to Antwerp or Rotterdam at \$10.50, with option of Hamburg at 45 cents more for loading this month. Charters in other directions from Hampton Roads include West Italy at \$12.50 for three to five consecutive voyages commencing September, and two W. R. Smith steamers to Japan at 143s., October/November. The *Sibella* is chartered for coal from Baltimore to Buenos Aires at \$18.50, September. Many orders are quoted for grain from North America and rates have been steady at any rate for October/November. Owners who do not require freight in dollars are in the best position to secure full rates. The Ministry of Food is now open from the St. Lawrence to the United Kingdom for all positions from early October to the end of the season. The Committee has chartered *Sandsend* for heavy grain, St. Lawrence to U.K., 44,000 quarters at 22s. 6d. per quarter, option Antwerp or Rotterdam at 7½d. less, October 2 lay days. Tonnage has been fixed for heavy grain from St. Lawrence to Antwerp or Rotterdam at \$12.50, free discharge, September and October, and at \$13 on gross terms, November. The *Manda* is fixed for heavy grain, British Columbia to U.K., at 146s. 3d., option Antwerp or Rotterdam 3s. less, October/November. The *Stylianios N. Flassopoulos*, 9,500, 10 per cent, has been chartered by the Committee from Tsingtao to India at 125s., basis heavy grain, October 10/30. Further tonnage has been taken for d.b.b., Archangel to U.K. at 510s. per standard, October. Several more ships have been chartered for coal from Wales to Buenos Aires at 120s., October and October/November. Time charter inquiry is fairly well maintained, especially for the trip to Australasia. The *Acyone Angel* is chartered at 57s. 6d. for a trip to New Zealand, delivery Gothenburg, October. Her particulars are: 10,490 d.w., 489,000 feet bale, 10/10½ knots on 23/24 tons oil.

## Air Charter Business

Quiet conditions have ruled in the air charter market during the week. Operators have not had much tonnage, at any rate of the larger size, to offer, partly on account of their extensive commitments in the employment of the Government. Government chartering is arranged directly with the operators of aircraft and does not afford scope for brokers. On the other hand the scheduled air corporations are increasingly turning their attention to securing employment on charter. For this purpose they find the air side of the Baltic Exchange to be indispensable.



# YUGOSLAV SEABORNE TRAFFIC

MERCHANT TONNAGE NEARLY DOUBLED SINCE 1946

By E. A. BELL

YUGOSLAVIA'S seaborne foreign trade during 1950 totalled 3,161,267 freight tons, or nearly 7 per cent more than the total of 2,967,160 tons recorded for 1949. Since 1948, the year when the Yugoslav foreign trade began shifting westwards as a result of the Cominform quarrel, the increase from that year's total of 2,079,716 tons was at the spectacular rate of 52 per cent. A comparison with the position obtaining prewar shows that the volume of the country's seaborne foreign trade in 1950 was more than 66 per cent above the level of 1,893,012 tons reached in 1939. These figures alone afford convincing proof of the massive expansion of the country's exchange in goods with foreign countries. No exact particulars have been disclosed to date as to the seaborne share in the country's entire foreign trade but it is confidently believed that the prewar ratios have been exceeded. In 1939, 42 per cent of the country's exports, and 46½ per cent of the country's imports used the sea routes.

## Expansion in Imports

An analysis of the development in 1950 shows a considerable expansion in seaborne imports from 921,050 tons in 1949 to 1,115,043 tons, a rise of some 25 per cent. This contrasts with a slight drop (about 1½ per cent) in exports from 2,046,110 tons to 2,019,226 tons. The increase in imports was due to substantial supplies of food and fodder necessitated by the extremely bad harvest resulting from months of prolonged and severe drought. Foodstuffs sent in aid by the United States alone, up to the end of June 1951, totalled some 520,000 tons, of which 420,000 tons arrived by sea. A fraction of the seaborne total was landed at the Yugoslav zone in the Greek port of Salonica, only 46½ miles by rail from the southern frontier of Macedonia, one of the country's six constituent republics. The adverse circumstances mentioned were, on the other hand, responsible for the contraction of export shipments.

A review of the carriers of the seaborne trade, however, discloses a position to the detriment of the Yugoslav flag. Imports by Yugoslav ships, at 427,890 tons in 1949, increased to 498,118 tons in 1950, an expansion of about 15 per cent, whereas imports by foreign ships rose by about double that rate, from 493,160 tons to 616,893 tons.

Viewed against total seaborne imports the Yugoslav

share fell from 46½ per cent in 1949 to 43½ per cent in 1950. In 1948, the Yugoslav share had been 41½ per cent and the foreign share 58½ per cent, while in 1939 the Yugoslav participation had been as high as 60 per cent (316,477 tons out of imports totalling 526,275 tons). As to exports, the Yugoslav shares were even less favourable, having fallen from 36½ per cent (557,268 tons) in 1948 to 29½ per cent (594,739 tons) in 1950. The volume of goods imported and exported by Yugoslav vessels, however, has shown a continuous expansion, from 783,114 tons in 1948, to 1,058,740 tons in 1949, and to 1,092,887 tons in 1950, an increase of 35 per cent between the two end years.

## The Merchant Fleet

Despite the strenuous efforts made to add new units to the country's merchant fleet, the increase in tonnage has not been sufficient to keep pace with the rapidly expanding foreign trade, the Yugoslav share of the goods carried falling from 62.8 per cent in 1947 to 34.5 per cent in 1950. The high percentage in 1947 was due to the fact that the country was trading prevalently with Soviet Europe by way of overland routes and the Danube. If it is borne in mind, however, that at the end of the war Yugoslavia was left with only 38 vessels, totalling 64,176 tons gross (as against some 80 ocean-going vessels of about 100,000 tons gross prewar), it will be appreciated that the expansion in recent years has been a notable achievement, as shown in the following table.

Development of the Yugoslav Merchant Fleet 1946-1950

End of year	Number of vessels	Tons gross	Tons d.w.
1946	119	134,576	218,072
1947	133	164,097	256,505
1948	138	181,346	279,731
1949	150	202,751	312,492
1950	157	224,587	343,427

When the country became involved in the war in April 1941, all the Yugoslav vessels then in Allied or neutral ports were placed at the disposal of the Allies. During the war 42 vessels became casualties; this is in addition to 12 vessels which had been lost between the outbreak of the war in 1939 and April 1941. Between 1945 and 1946 approximately 30 vessels which had been operating in Allied hands were returned to Yugoslavia. From the table it will be seen that in the five years ending 1950 the Yugoslav fleet increased

## Cargo Motorship "Sarajevo"

Built at the Treci Maj shipyard at Rijeka for the Jugoslavenska Linijaska Plovidba, the single-screw cargo motorship *Sarajevo* is the third of four sister ships for service between Yugoslavia and Near East ports, the other vessels being the *Zagreb*, *Skopje* and *Titograd*. Of 3,257 tons gross, the *Sarajevo* has a net tonnage of 1,763 and a deadweight capacity of 3,904 tons. Her principal dimensions are 340 ft. length o.a., 305 ft. b.p., 45 ft. 11 in. breadth moulded and 21 ft. 7 in. draught. There are five cargo holds served by eleven electrically-operated derricks. Accommodation is provided for twelve passengers. The main propelling machinery consists of 7-cylinder Fiat diesel engine of the two-stroke single-acting type. This engine develops 3,150 i.h.p. and provides the ship with a loaded speed of 14½ knots



by nearly 67 per cent as to gross tonnage, and by almost 58 per cent in carrying capacity.

The nucleus of the tonnage added since the war consists of cargo liners newly built either by the home shipbuilding industry or by foreign shipyards, while a certain number of ships were bought second-hand as an immediate postwar expediency to satisfy the pressing need for readily available vessels. A few ships were obtained as war reparation from Germany, while 12 ocean-going ships underwent reconstruction or modernisation at home ports. Finally, a few units were added which had been salvaged in home waters.

The building of new ships abroad has been a particularly severe strain on the country's finances, with the resulting tendency to increment the potentiality of the home shipbuilding industry, although so far only one concern, the Treči Maj shipyard at Rijeka, has been in a position to build medium or large-size ocean-going vessels. In 1947, Din. 436,000,000 (approximately £2,167,000) was appropriated in respect of ships ordered from foreign shipyards, as compared with Din. 336 mn. (£1,667,000) earmarked in the same year for new ships to be built by the domestic industry.

#### Orders for Foreign Yards

In 1948, Din. 280 mn. (£1,390,000) more was allocated for new ships to be built at home than was set aside for new ships to be built abroad, while for the current year allocations in respect of foreign-built ships total only Din. 200 mn. (£1,428,000), or considerably less than half the total of Din. 490 mn. (£2,000,000) set aside for new ships to be built at home. For the sake of comparison, it must be borne in mind that for 1947 and 1948 the pre-devaluation rate of exchange of 20½ Dinar to the pound has been applied in contrast to the present rate of exchange of 140 Dinar used in connection with the 1951 totals. From the above it appears that preference has been given to an increasing extent in the past years to the home shipbuilding industry both for currency reasons and in view of its increased output potential.

Among the latest additions to the Yugoslav merchant fleet, the motor vessel *Slovenija* was referred to in THE SHIPPING WORLD of February 21, while a picture of the vessel appeared in the issue of March 7. This vessel, as well as the m.v. *Crna Gora*, also built by Nederlandsche Dok-en Scheepshouw Maatschappij, of Amsterdam, is now in service between Yugoslavia and North America. The *Crna Gora* (the name means "Montenegro"), at 464 ft. 5 in., is somewhat longer than the *Slovenija* (432 ft. 11½ in.), and has a deadweight capacity of 9,240 tons. Her engine of 6,500 h.p. develops a loaded speed of 17½ knots.

#### Entry of Motorship "Ucka"

The motor vessel *Ucka*, which was completed at the Treči Maj shipyard, of Rijeka, and made her trial trip on May 1, provides a dramatic wartime story. The vessel, of 4,200 tons d.w. and completed hastily during the 1939-1945 war, was used by the Germans as an auxiliary cruiser for their operations in the Adriatic Sea, eventually being bombed and sunk off Rijeka. Salvaged in 1950 by the Yugoslav salvage concern "Brodospas," the ship was converted into a cargo liner. Her length is 383 ft. 9 in., and she has been fitted with a 5,000-h.p. diesel engine developing a loaded speed of 16 knots. Prior to her being taken over by the Germans she was Italian-owned.

Among the work at present in hand at the Rijeka shipyard referred to are three cargo liners of some 4,000 tons d.w. each nearing completion. They constitute the second series of vessels of this type, the first series, built by the same yard and comprising the m.v. *Zagreb*, *Skopje*, *Sarajevo* and *Titograd*, having been completed in the years 1949 and 1950. Among vessels added in recent months has been a further vessel obtained from Germany as war reparation. A motor cargo ship formerly known as *Ingeborg*. In compliance with the agreement concluded between

(Continued in next column)

## Ceylon Shipping Corporation

Preliminary Steps by Government

By THE SHIPPING WORLD'S Own Correspondent

A SCHEME for the establishment of a Corporation on the lines of Air Ceylon for the operation of a shipping service between Ceylon and other countries is being prepared by the Ceylon Government. The original intention of floating a shipping company exclusively by Ceylon has been dropped in favour of an organisation with the assistance of a foreign shipping firm of international repute and wide experience.

One of the chief obstacles to the Ceylon Government forming a shipping line is the difficulty of getting the necessary ships at an early date. Most shipyards in the world today are engaged in executing large orders, and any chance of Ceylon obtaining ships soon would appear remote. It is also felt that the experience and technical skill of any shipping firm which enters into an agreement with Ceylon to form a corporation will be a valuable contribution.

With this in view, inquiries have been made of several leading shipping lines and the response has been very encouraging. Among the firms which have expressed a desire to form a corporation with Ceylon are some of the leading European shipping lines. Meanwhile, the Ceylon Government has obtained the services of a shipping expert to prepare information about the type of vessel suitable for operation on the routes in which Ceylon is interested.

#### Source of Capital

According to one estimate, a capital of Rs. 50,000,000 will be necessary for the working of the Corporation. Ceylon will contribute not less than half the capital, and the rest will be furnished by the partner firm, probably in the form of ships and other assets. Ceylon's share of the capital will be contributed partly by the Government and partly by the Ceylonese public.

As a start, it is hoped to run a service between Ceylon and Indian ports and Australia and Burma. As the island's essential imports are from these countries it is felt that the establishment of a service to serve this region will ensure regular shipments of essential consumer goods.

When all details with regard to this scheme are concluded, a Bill will be introduced in Parliament by the Government on the lines of the Air Ceylon (Incorporation) Bill. Legislation will also seek to make adequate provision for the training of Ceylonese personnel so that they may eventually serve in ships owned by the Corporation. The Corporation's vessels will only carry freight in the first place. The inauguration of a passenger service will be considered later.

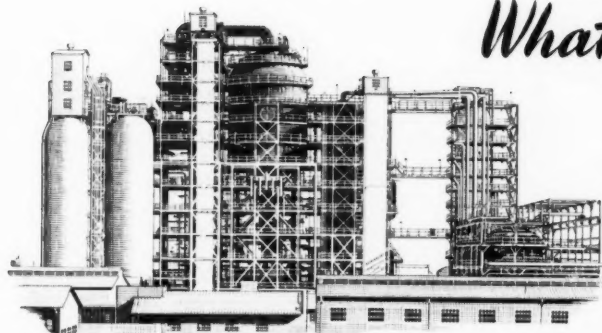
(Continued from previous column)

Yugoslavia and Italy at Rome on December 23, 1950, for the restitution by Italy of Yugoslav ships requisitioned during the war, Italy returned the m.v. *Ist* early in August. Of the other three ships, *Vila*, *Budimir* and *Franje*, the last named, a vessel of 2,400 tons gross, which the Italians have rechristened *Avionia*, is to follow soon.

A very important addition has been the motor tanker *Lendava*, of 12,560 tons d.w., which made her maiden voyage from Rotterdam early this summer. The *Lendava* is Yugoslavia's second oil tanker (appropriately named after the Lendava oilfields in the north-west of the country), the first one being the British-built (1930) m.v. *Jajce*, of 6,074 tons gross and reconstructed in 1947. Great interest attaches to the decision taken recently to adopt heavy diesel oil instead of gas oil for use in the main engines of the postwar-built motor vessels. Heavy diesel oil is a derivative produced by the Yugoslav refineries and its adoption will therefore result in a substantial saving of foreign currencies.

## INTERESTING FACTS ABOUT OIL

## No. 5.

*What's cracking?*

**C**racking" is a term used in the Oil Industry to denote techniques in the refining of Crude Oil. It was developed to increase the quantity of "straight run" gasoline (Motor Spirit) naturally available in Crude Oil and, at the same time, to enhance the quality of the product so as to meet the more exacting requirements of the Internal Combustion Engine due to improved design and construction.

The fuel used in the early days of the motor car was an ordinary grade of gasoline. It was the whole of the distillation cut which was too light to include kerosene. From 1912 onward and particularly during the 1914-18 War the greatly increased demand for more and better quality motor spirit led to refineries developing "cracking" processes.

"Thermal Cracking" introduced in 1914 was the first of these processes and, briefly, it consists of heating heavy oils in a furnace to high temperatures (ranging from 700°—1000° F.), under relatively high pressures for a controlled period of time. The large molecules of the oil are broken down or "cracked" into lighter molecules which go to make up motor spirit. These cracked spirits have better anti-knock properties when used in an internal combustion engine of modern design, than do spirits obtained by ordinary distillation. For this reason "straight run" spirits are often subjected to the same process, which is known, in this application, as "thermal reforming."

"Catalytic Cracking" represents one of the latest advances in refining technique. A catalyst is a substance which, by its presence, enhances chemical reaction without itself being chemically changed. Cracking carried out at a temperature of approximately 1000° F. and with the aid of a catalyst—usually compounds of Silicon and Aluminium—results in increased yields of high-grade products under more easily controlled operating conditions.

The first commercially successful catalytic process was operated in America in 1933 on the "fixed bed" principle in which the catalyst remains stationary in a set of reactors each of which is alternatively switched by time controlled valves between the reactions and regeneration cycles. Later the "movable bed" principle was introduced in which the catalyst is transferred from the reactor vessel to the regenerator vessel, and vice versa, by mechanical means. The most modern process is the "fluid" catalyst, in which the reaction is effected by means of a catalyst so finely powdered that it behaves like a fluid and can be circulated with the oil vapours, afterwards being regenerated and used again.



GENERAL BUNKER SALES AGENTS

INTERNATIONAL OIL BUNKERING



ANGLO-IRANIAN OIL COMPANY LIMITED

W.M. CORY &amp; SON LTD., CORY BUILDINGS, FENCHURCH STREET, LONDON, E.C.3



**SUNDERLAND  
FORGE**  
SHIPS' SWITCHBOARDS

THE SUNDERLAND FORGE & ENGINEERING CO. LTD. Head Office: PALLION, SUNDERLAND

*Ten Miles of  
MacGregor*  
**PATENT STEEL HATCH COVERS**

With an average breadth of 24ft. have been fitted to 1,500,000 gross tons of shipping, with satisfactory results.

With this experience behind us hatch cover problems can safely be placed in our hands.

No tarpaulins. No web beams.

No tents. Rapid operation.

Minimum upkeep costs.

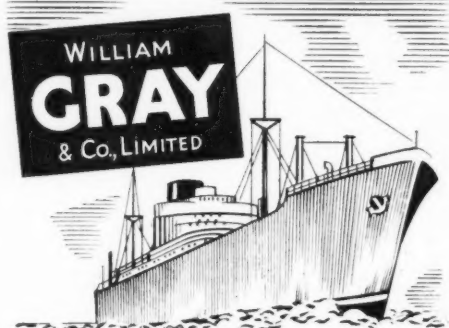
Enquiries invited.



**MacGREGOR & CO. (Naval Architects) LTD**  
WHITLEY BAY, NORTHUMBERLAND.

Phone : Whitley Bay 21189

Continental Branch—ETS MacGREGOR-COMARAIN, 14, RUE  
CHARLES LAFITTE, NEUILLY-SUR-SEINE, FRANCE



**SPECIALISTS in**  
**MODERN CARGO VESSEL**  
**CONSTRUCTION**

SHIPBUILDERS AND ENGINEERS  
SHIP, ENGINE AND BOILER  
REPAIRERS

**WEST HARTLEPOOL**

# COAL AND OIL

## EUROPEAN OIL REFINING EXPANSION

THE OIL Committee of the O.E.E.C., which in October 1949 presented its first report on the coordination of oil refinery expansion in Europe, has now published its second report on the same subject. In the intervening period the European refining industry has grown rapidly, and is now providing the major part of the petroleum products required by O.E.E.C. countries. The Oil Committee estimates that the refinery output of the participating countries will reach 59.2 million metric tons in 1952/53. This is slightly more than had been estimated two years ago, and will be exactly equal to the tonnage of inland consumption of these countries. There is, however, an additional demand of nine million tons for bunkering, and of nearly three million tons for export to countries outside the O.E.E.C. area, and a similar volume of imports will therefore be supplied from other sources. The Oil Committee's original forecast and its appreciation of relative economic development have, on balance, proved remarkably accurate. The main assumption underlying the original proposals of the Oil Committee was that inland consumption of petroleum products in the O.E.E.C. countries between 1949/50 and 1952/53 would rise by an average of about nine per cent annually, or from 43.9 to 58.6 million tons. In the few years before the war, total inland consumption in these countries averaged 26.1 million tons annually. The Committee's earlier estimates of the probable increase between 1949/50 and 1952/53 had been regarded by many as highly optimistic. But they have been fully justified in the light of the remarkable economic recovery of most O.E.E.C. countries. It is now expected that inland consumption will actually reach as much as 60.9 million tons in 1952/53.

### Growing British Crude Oil Imports

THE PROBABLE situation with regard to oil supply and demand in 1952/53—the first year after the end of Marshall Aid—is shown in the accompanying table. As far as the United Kingdom is concerned, the most notable point remains one which has already been commented upon, namely, the tremendous advance in the importation of crude oil into this country needed to feed the ever-growing refinery capacity. The output of U.K. refineries in 1952/53 is estimated at 19,116,000 metric tons (about 18,800,000 long tons), and with imports of refined products estimated at some 3½ million tons, a total of some 24 million tons of crude or refined oil will require carriage into this country. The corresponding figure for 1949 was about 17 million tons, but of this only about 6½ million tons was in the form of

crude oil. The main changes in the various countries' new 1952/53 inland consumption estimates (as compared with those given in the earlier report) include surprisingly large increases of about 90 per cent in the case of Austria and about 40 per cent in the case of Germany—two countries where economic recovery lagged behind in the immediate postwar period but has advanced rapidly in the past two years. The former estimates for the U.K. and France have been slightly reduced in the new report, owing chiefly to the lower fuel oil estimates for the U.K. and to a lower expected demand for bitumen in France. The figures for Italy, Benelux, Sweden, Denmark, Greece, Ireland and Iceland have been raised by between 5 and 15 per cent, while those for Switzerland, Portugal and Turkey are almost unchanged. In the case of Norway, the new 1952/53 estimate of total demand is nearly four times the pre-war average, but annual consumption represents a 25 per cent reduction of the over-optimistic estimate made in 1949.

### Shorter Notes

THE South African Department of Commerce and Industries has announced that plans for the petroleum refinery to be constructed at Durban have been completed. The design capacity will provide for the processing of about 200,000,000 imperial gallons of crude oil a year and the refinery will be in a position to manufacture about 21.5 per cent of the petrol, 6.7 per cent of the power kerosene, 33.4 per cent of the illuminating kerosene, 20.7 per cent of the automotive diesel and 9.7 per cent of the industrial diesel requirements in South Africa. The figure of 200 million gallons corresponds to about 8 million long tons of crude oil, and would appear to be extraordinarily high.

## OFFICIAL NOTICES

### New Company

A. & M. WILLIAMS (SEAMEN'S OUTFITTERS), LTD., 62-4 West India Dock Road, London, E.14.—Registered August 29. Nominal capital: £2,000 in £1 shares. Directors: A. Samitsky, 29-30 Ford Square, London, E.1; M. Sanett and W. Sanett, 62-4 West India Dock Road, London, E.14.  
[Information from *Jordan's Daily Register of New Companies*]

### Increase of Capital

ARY SHIPPING, LTD., 2/3 Crosby Square, London, E.C.3.—Increased by £50,000, in £1 shares, beyond the registered capital of £30,000.

### Change of Name

SHIPWORK, LTD., consulting engineers, marine surveyors, etc., 30 Cornhill, London, E.C.3.—Name changed to Meikle, Tolliday, McWilliam & Co., Ltd., on August 11.

### O.E.E.C. AREA: SUPPLY-DEMAND ESTIMATE OF REFINED PRODUCTS IN 1952-53

(Thousand Metric Tons: Year ending June 30, 1953)

	Refineries Output (a)	Substitute Fuels	Supplies on Consignment (b)	Imports Payable in	Other Imports	Total	DISPOSAL				
							Inland Consumption	Bunker Deliveries (c)	Exports to O.E.E.C. Countries	Other Exports	Total
U.K.	19,116	421	—	639	3,435	23,611	17,760	3,364	2,373	114(d)	23,611
France	15,598	—	150	161	31	15,940	12,104	1,352	679	1,805(d)	15,940
Benelux	7,080	—	214	879	212.5	8,386.4	5,361.6	1,251	1,767.3	6.5(d)	8,386.4
Italy/Trieste	8,921	—	370	120	227	9,638	6,987	835	849	967	9,638
W. Germany	6,010	—	—	10	495	6,515	5,814	600	101	—	6,515
Sweden	1,119	75	—	1,002	2,323	4,519	4,349	155	20	—	4,524
Denmark	27.5	—	95	499	1,283.5	1,905	1,751	154	—	—	1,905
Norway	33	—	15	467.5	1,096.5	1,612	1,361	177	—	—	1,538
Portugal	306.1	—	798.4	168.4	197.05	1,469.95	660.55	798.4	—	11(d)	1,469.95
Greece	—	—	38	376.25	696	1,100.25	1,071.25	29	—	—	1,100.25
Switzerland	90	14	—	359	549	1,052	1,052	—	—	—	1,052
Austria	868	3	—	8	108	987	987	—	—	—	987
Turkey	55.5	—	—	584.5	260	900	740	160	—	—	900
Ireland	—	5	—	243	487.5	735.5	715	20.5	—	—	735.5
Iceland	—	—	—	108	127.5	235.5	160.6	74.9	—	—	235.5
Total	59,224.1	518	1,670.4	5,665.55	11,528.55	78,606.6	60,874	8,970.8	5,789.3	2,903.5(d)	78,537.6

(a) Including quantities processed on an agency basis; (b) other than from local refineries; (c) ocean-going vessels, all flags; (d) "other exports" include supplies to the exporting country's own overseas territories as follows: U.K. 27, France 1,805, Benelux 1, Portugal 11—Total, 1,844



## The New Esso Refinery At Fawley

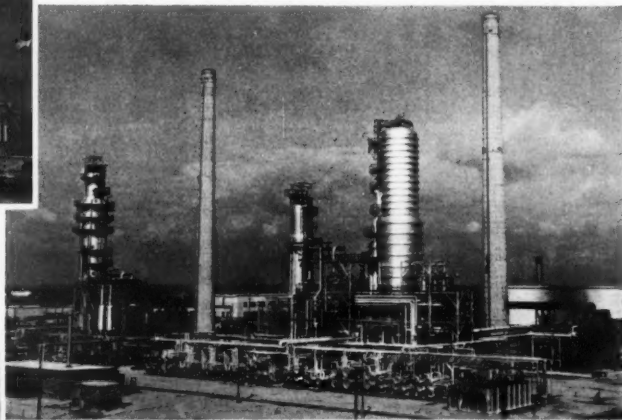
OPENED BY MR. ATTLEE LAST FRIDAY

The Esso Petroleum Company's new refinery at Fawley, on Southampton Water, was officially opened on Friday by the Prime Minister. The refinery, which has cost £37,500,000, will have an annual output when in full production of 6,500,000 tons of petroleum products, making it the largest in Europe. This output is nearly 30 per cent of the present demand of the British Isles. The crude oil employed will come from Middle East sources, and will be predominantly sterling in content



Above: The catalytic cracking unit

Right: The single and two-stage crude units

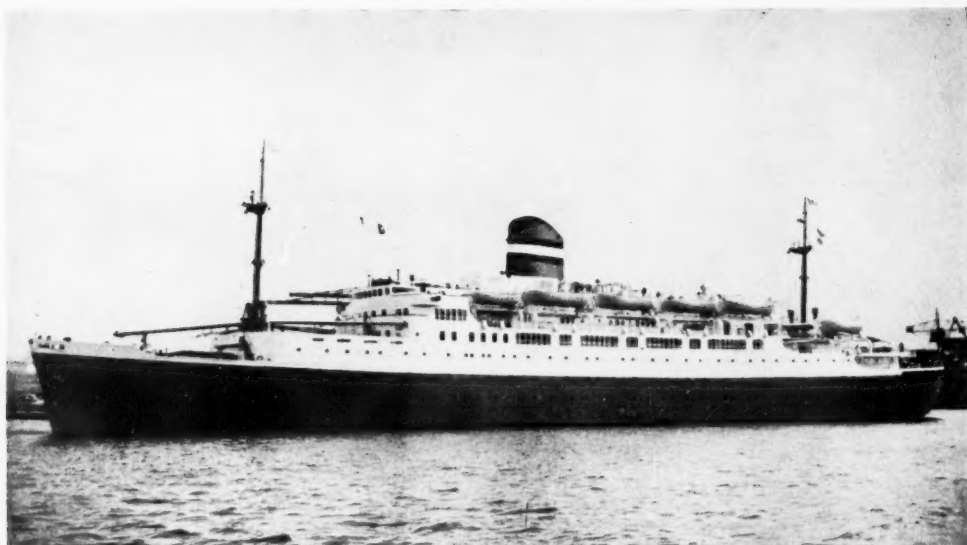


Left: The first tanker to berth at the new marine terminal, the "Esso Fawley," comes alongside



Below: The marine terminal, shown here in course of construction, could accommodate four 39,000-tons tankers at once





## TRANSATLANTIC PASSENGER LINER "RIJNDAM"

FEATURES OF THE NEW HOLLAND AMERICA LINER

By THE SHIPPING WORLD'S Own Correspondent

WHEN Mr. W. H. de Monchy, general manager of the Holland America Line, took delivery of the new passenger ship *Rijndam* from the builders, he said that the new ship was meant not to take away business from other companies, but "to create new business". The *Rijndam*, he added, was not for millionaires, but for the tourist of smaller means and for emigrants. As outlined in THE SHIPPING WORLD of January 10, 1951, the *Rijndam* is the first of a new type of ship. It was felt that there was a need for ships not only to carry emigrants in more comfort than they could hitherto enjoy in converted troopships, but also suitable for making cruises at reasonable cost. Moreover, in the season, ships like the *Rijndam* could be used for ferrying Americans who cannot afford to travel in the big luxury liners across the Atlantic Ocean. Hence, in the *Rijndam*, all superfluous luxury has been banned, but at the same time all modern comfort is at the disposal of the passengers.

### Originally to be a Cargo Ship

The *Rijndam* was originally designed as a cargo ship named *Dinteldijk*—a sister ship of the *Diemerdiik*. The keel was laid on December 17, 1949, in the shipyard of Wilton-Fijenoord, N.V., Schiedam. Meanwhile the company was thinking of converting a C-3 "flat-top" ship into a passenger ship for cheap travel, as there was a growing shortage of passenger accommodation on the Europe-North America route. When, in February 1950, a solution still had not been found, the builders suggested the conversion of the *Dinteldijk* into a passenger ship. This was still possible at some trouble as the hull was not yet entirely completed. In June 1950 a new contract was signed. The *Dinteldijk* became the *Rijndam* and a sister ship, the *Maasdam*, to be completed in 1952, was ordered at the same time.

The most striking feature of the new ship is that whereas only 39 passengers are carried in the first

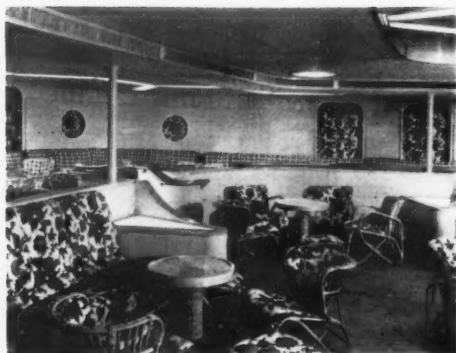
class, there are no fewer than 854 in the tourist class. Of these 63 per cent are accommodated in two-berth cabins.

The *Rijndam* is fitted with the FCM/Valensi funnel, manufactured by Forges et Chantiers de la Méditerranée, which has been fitted to a number of French ships recently.

The principal particulars of the *Rijndam* are as follows:—

Length overall	503 ft. 3½ in.
Length b.p.	474 ft. 11 in.
Breadth moulded	89 ft.
Depth to A deck	42 ft.
Depth to boat deck	68 ft. 6 in.
Draught	28 ft. 9 in.
Displacement	17,857 tons
Gross tonnage	15,015 tons
Deadweight tonnage	6,957 tons
General cargo capacity	180,415 cu. ft. (grain)
Insulated capacity	15,250 cu. ft.
Propelling machinery	Steam turbines developing 8,500 s.h.p. at 85 r.p.m. propeller speed
Speed	16.5 knots

The ship was built to Lloyd's Register class 100 A1 and under supervision of the Dutch Scheepvaart-Inspectie. As can be seen from the accompanying general arrangement drawing, there are two holds forward and two aft of the machinery space. In holds 1 and 2 there is a tweendeck at 10 ft. height (deck D) and tweendecks in all holds (deck C). C deck forward contains accommodation for the crew. Tourist-class cabins, mostly two-berthed, are arranged on B deck, with bathrooms, showers and toilets amidships, and deck and engineroom personnel accommodated forward. The crew's galley, messrooms and bar are arranged aft on the port side of this deck, with the laundry on the starboard side. The tourist-class dining room and galley is arranged amidships on A deck, with additional tourist-class cabins on this deck as on the main deck. The public rooms on the promenade deck consist of a palm court, card room, library, lounge, and smoking



Tourist-class palm court



Tourist-class smoking room

room with bar. There is an open-air swimming pool also on this deck. The greater part of the boat deck is devoted to first-class accommodation, including dining room, smoking room and bar. The officers are accommodated on the bridge deck.)

All cabins in the first class have a private bathroom or shower. There are two 2-berth cabins with an extra Pullman bed, bathroom and storeroom, seven 2-berth cabins with extra Pullman bed and bathroom, and six single-berth cabins with extra Pullman bed and shower. The cabins are air-conditioned (as is the rest of the ship) but have electric heaters and fans as well. The lounge, seating 42 people, is on the boat deck, and is divided into two parts, contrasting in height, colour and type of wood panelling. The ceiling of the lower part is in panels of profiled walnut, white metal piped. The bulkheads are also in walnut. A quiet writing corner is provided for and there is a bar and pantry on the starboard side. The other part of the lounge has elmwood bulkheads. The walnut chairs have grey-blue and gold upholstery, finished with leather. The walls of the dining saloon are in cherrywood, piped with ashwood and finished with cream artificial leather. The furniture is also of cherrywood, the chairs being upholstered with silver-green *velours d'Utrecht*.

#### Cabins Can be Combined

Most of the cabins in the tourist class can be combined together to accommodate families of up to eight people. There are two single-berth outer cabins, four single-berth inner cabins, 101 two-berth outer and 169 two-berth inner cabins, each with one bed and one Pull-

man bed; 26 three-berth outer and 2 three-berth inner cabins (two beds, one Pullman); and 22 four-berth outer and 34 four-berth inner cabins (two beds and two Pullman beds). A large number of bathrooms, showers and toilets is arranged on each tourist deck. Each cabin has a writing table, changeable into a dressing table, chair, bedlamp, and sufficient shelf and locker space. The furniture is in mahogany, teak and ashwood.

#### Palm Court

The palm court, forward on the promenade deck, allows a magnificent view in three directions. In the centre there is a dance floor enclosed by a slightly raised part with a balustrade. Glass doors on both sides lead to the entrance hall. The furniture consists of chairs and settees with flowered cretonne cushions. The cardroom, entered from the vestibule, has seven playing tables with wooden upholstered armchairs. The library is in Honduras mahogany. The lounge is amidships, abaft the engine casing. The walls are of Honduras mahogany, the furniture of mahogany with rexine and lumite upholstery. There are 109 chairs and a number of settees, which provide ample seating space. By adding collapsible chairs the seating capacity can be increased to 175 when the lounge is being used as a cinema. The upper part of the bulkheads between the lounge, cardroom and library is open, with decorative trellis-work, but can be closed during cinema performances. Double doors on both sides give access to the smoking room. This room also contains the bar and is in veneered Italian walnut. Three glass sections in the after wall open on to the promenade deck. The



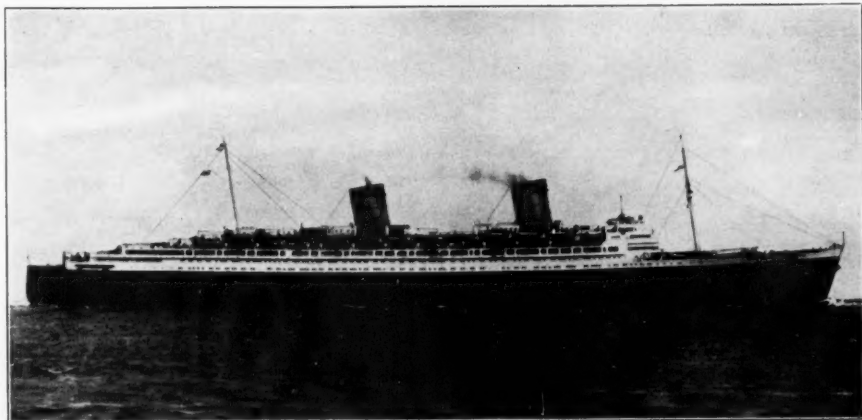
Tourist-class library



First-class dining saloon

# JOHN BROWN

⌘ ⌘ & Company Limited ⌘ ⌘



*Cunard White Star Liner "Queen Elizabeth"*

*The works of Messrs. JOHN BROWN & CO., LTD., at CLYDEBANK, are well equipped for the construction of Passenger Liners and Cargo Vessels, Cross Channel Steamers, Oil Tankers, Reciprocating Machinery, Geared Steam Turbines and Diesel Engines; also Gas and Water Turbines, Pressure Vessels and Equipment for the Petroleum Industry*

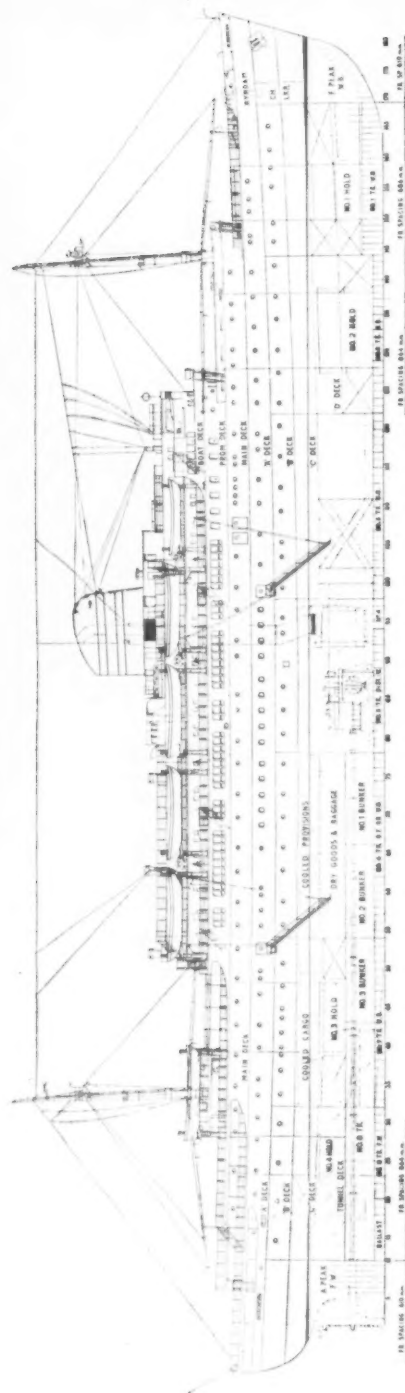
## CLYDEBANK ENGINEERING AND SHIPBUILDING WORKS:

CLYDEBANK, near GLASGOW.

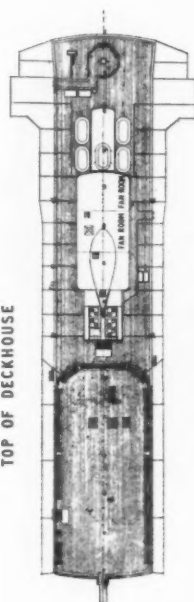
Registered Office: Atlas Works, Sheffield. Telephone No: Clydebank 2020 (10 lines)

London Office:  
8, The Sanctuary, Westminster, S.W.1.

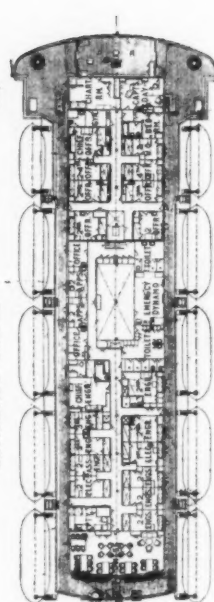
Telegraphic Address:  
Shipyard Clydebank



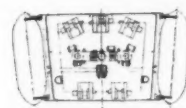
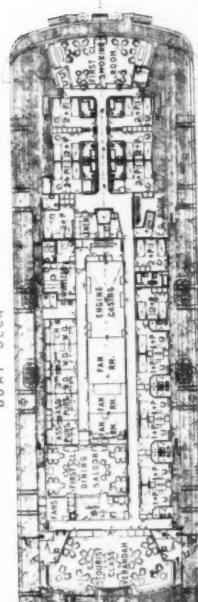
TOP OF DECKHOUSE



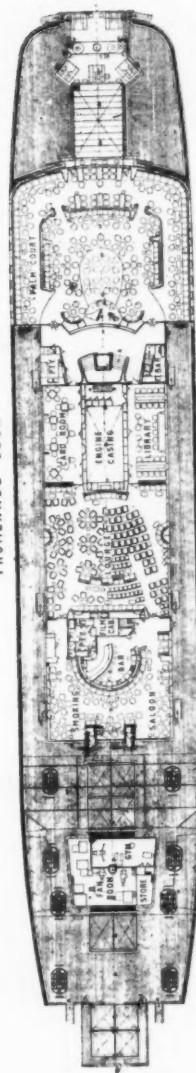
NAVIGATING BRIDGE



BOAT DECK



PROMENADE DECK

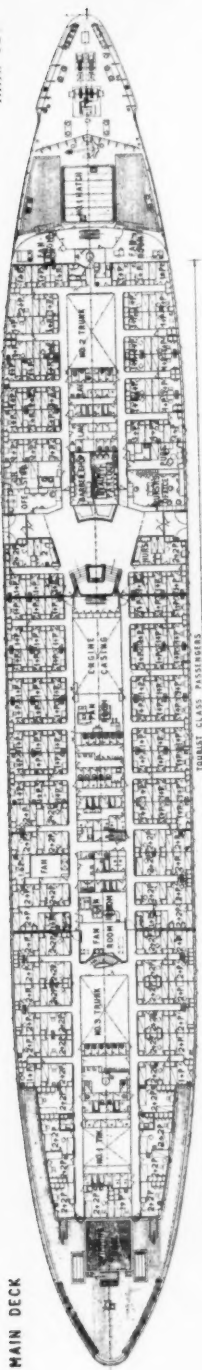


MAIN DECK

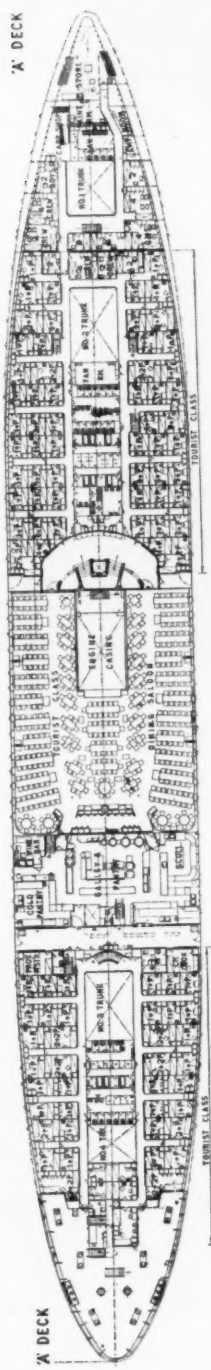
MAIN DECK



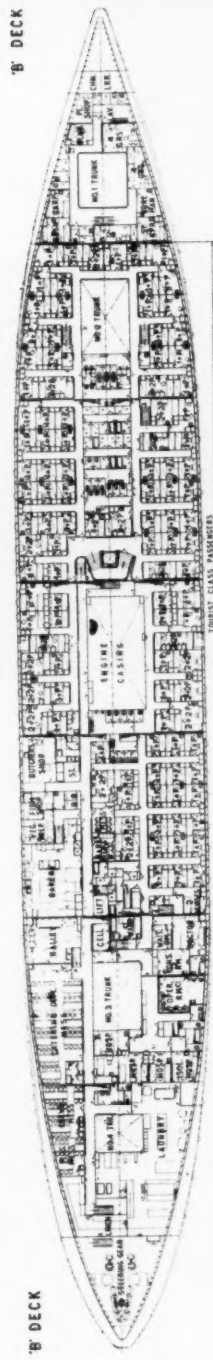
# MAIN DECK



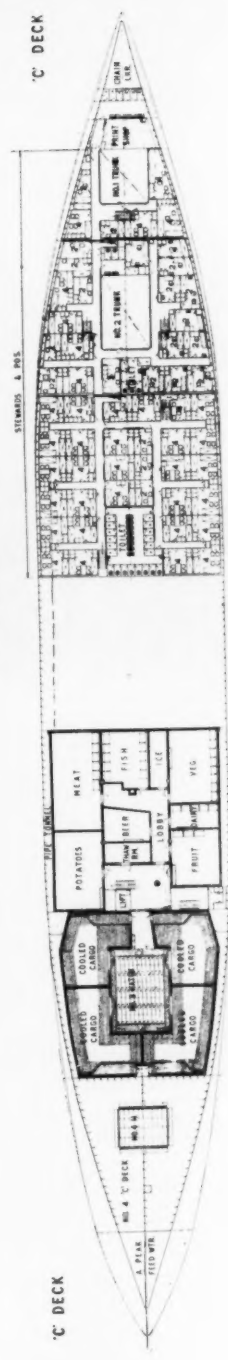
## 'A' DECK



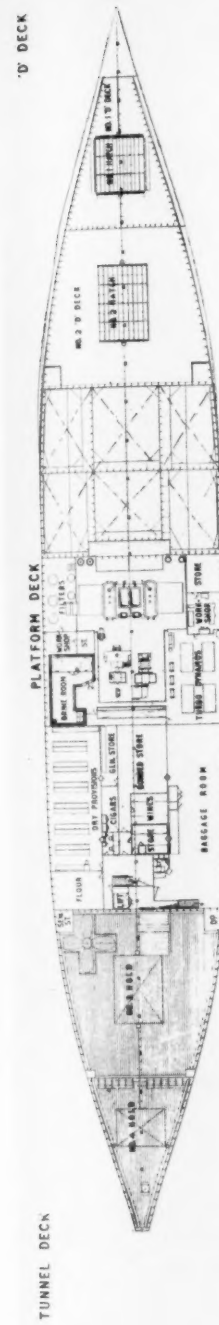
## 'B' DECK



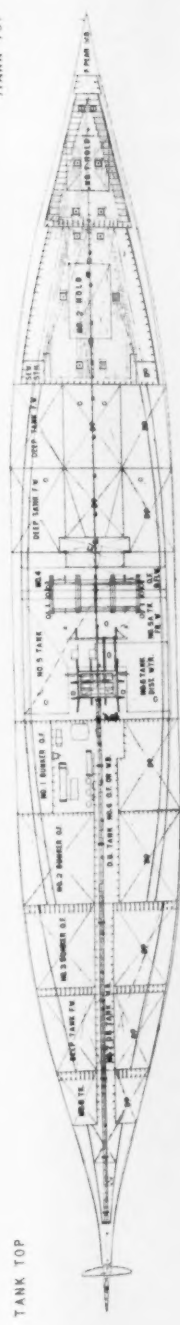
## 'C' DECK



## 'D' DECK



## TANK TOP



General arrangement of the turbine-driven passenger liner "Rijndam," built by N.V. Wilton-Fijenoord, Schiedam, for the Holland-Amerika Lijn

# F. T. EVERARD & SONS LTD

6-8, FENCHURCH BUILDINGS, : : : LONDON, E.C.3.

LONDON OFFICE  
PHONE: ROYAL 8181 (6 lines)

TELEGRAMS:  
EVERASHIP FEN, LONDON.

MOTOR AND  
STEAM  
SHIPOWNERS

TUG & LIGHTER  
OWNERS



Motor Vessel "SUPREMACY."

GREENHITHE OFFICE  
PHONE: GREENHITHE 123  
(2 lines)

TELEGRAMS:  
EVERASHIP GREENHITHE.

TANK STEAMERS  
AND  
TANK BARGES  
COASTING AND  
RIVER SAILING  
BARGES

A large fleet of Shallow Draft Motor Ships and Tank Ships suitable for working to small ports and up river destinations in coasting and short sea trade.

Transport costs saved by berthing direct alongside Factories and Works for discharge.

## Announcement by Anglo-Iranian Oil Company, Limited

It has been brought to the Company's notice that the Government of Iran in disregard of its solemn obligations to the Company, of the recent Order of the International Court of Justice, and of its international obligations, attempts to sell crude oil and oil products derived from the area covered by the Convention of 29th April, 1933.

The Company is confident that no oil company of repute or any tanker owners or any brokers of standing will countenance any direct or indirect participation in the unlawful actions of the Iranian Government. Should, however, any concerns or individuals enter into transactions with the Iranian Government in regard to the oil products concerned, they are warned that this Company will take all such action as may be necessary to protect its rights in any country.

ANGLO-IRANIAN OIL COMPANY, LTD.

Britannic House, Finsbury Circus, London, E.C.2

## OIL and PETROL JOINTS

Langite, with its natural 'liveliness,' makes a perfect seal, and heavy mechanical pressure between joint faces is unnecessary. Resists Oil, Petrol, Benzol, Naphtha, Turpentine, Acetone, Methylated Spirits, etc. Contains no rubber and is non-perishable and non-hardening.

Supplied ready cut to shape in any thickness, plain or reinforced, to any desired cross-section; or in strip or sheet form.

Various grades have been developed for use in electrical, aircraft and general engineering; typical applications include washers and gaskets for valve, crankcase and inspection covers, rocker gear, etc.

Sole manufacturers:

**CORK MANUFACTURING CO., LTD.**

(Associated with Flexo Plywood Industries Ltd.)

**SOUTH CHINGFORD, LONDON, E.4.**

Telephone: Silverthorn 2666 (7 lines)

**LANGITE**  
JOINTING MATERIAL  
RESISTS OILS,  
SPIRITS, PETROL, BENZOL

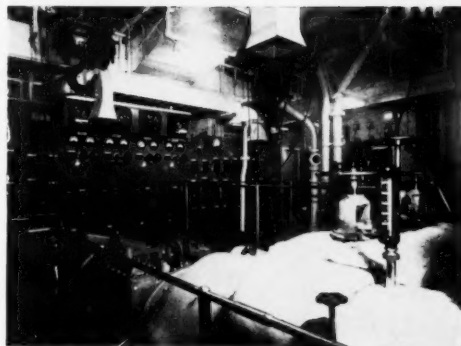
tourist veranda aft on the boat deck is used as a nursery during the day. The tourist-class dining room, entered from the main hall through two double doors, seats 464. The oak panelling is in green-grey. The kitchen is connected with the dining room by two service hatches. The *Rijnendam's* panelling, furniture, etc., were designed by Mr. J. A. van Tienhoven and Mr. W. Hamdorff and executed by H. P. Mutters & Zn., De Nijs and C. H. Eckhart.

#### Propelling Machinery

The main propelling machinery consists of a cross-compound General Electric turbine set with double reduction gearing. Normal output is 8,500 s.h.p. at 85 r.p.m., the maximum output being 9,350 s.h.p. at 88 r.p.m., taking steam at a pressure of 440 lb. per sq. in. and a temperature of 740 deg. F. This is no doubt one of the turbine sets, as designed for C3-type cargo vessels, which were purchased by the Dutch Government in 1944. Others have recently been fitted in the Dutch liners *Billiton* and *Ampenan*. Steam is supplied by two Foster Wheeler type D oil-fired watertube boilers fitted with superheater and economiser, but without air preheaters. The normal steam capacity of these boilers is 17,000 kg. superheated steam at a maximum pressure of 475 lb. per sq. in. and temperature of 765 deg. F. Electric current at 230 volts D.C. is supplied by four General Electric and Worthington 300-kW turbo-generators. In addition there is one 50-kW diesel generator.

Great attention has been paid to the lighting installation, and special bed lamps were designed for the tourist-class accommodation. They are cone-shaped and movable, which enables them to be fitted in corners above the beds. Many of the public and service rooms, for example, the saloons on the promenade deck, hairdresser's saloon, doctor's room, chief steward's and purser's offices, are lighted by TL tubes specially made suitable for direct current (a recent improvement in the older TL types by the Philips Works).

Radio equipment includes two transmitters and one emergency transmitter, two receivers and an automatic alarm, all by the Radio Corporation of America. Space has been reserved for the installation of radio-telephony apparatus. Marconi radar is fitted in the chartroom, which also contains a radio-phone installation for contact with harbour services



The switchboard

at New York and Southampton. Navigational equipment includes Sperry radar, Sperry gyrocompass and five repeaters, Decca navigator, Sperry Loran, echometer, SAL log and an automatic pilot. There are 30 loudspeakers all over the ship for announcements and gramophone music. The bridge has a separate loudspeaker system for giving orders to the crew and to the shore. The ship has a central aerial system allowing each passenger to connect up his private radio set in his cabin.

Safety provisions include 15 Stone watertight doors: 12 of 6 ft. by 3 ft. on B deck and C deck, one of 4 ft. by 2 ft. in the tunnel, and two of 6 ft. by 5 ft. between hold No. 3 and the luggage and food storage spaces. There are 14 fire doors. The Mather & Platt sprinkler installation is divided into 17 sections with 1,500 sprinklers in all and an indicator on the bridge. In addition there is a Walter Kidde CO<sub>2</sub> installation. All lifeboats are of aluminium. There are ten boats for 110 people each, hand propelled by Fleming patent gear, and two for 65 people each, propelled by 12 h.p. C.L.M. diesel engines. The boats rest in electrically-operated gravity davits.

## Officers' (Merchant Navy) Federation

### Wider Difference in Rates of Pay

THE ANNUAL report of the Officers' (Merchant Navy) Federation, which was adopted at the annual general meeting on Friday, welcomes the new agreement on conditions of service, providing a more marked difference between rates of pay for senior and junior, and qualified and unqualified officers. It is the Council's sincere hope that from the new agreements will develop a wages structure in the British Merchant Navy which will offer substantial inducements to officers to strive for promotion in their chosen branch of the profession. "It is also hoped that it will prove to be a decisive and constructive step towards making a seafaring career one which will not only maintain its initial appeal to British youth—an appeal which the experience of recent years has shown to be as strong as ever—but will also satisfy a newly-qualified junior officer that in material rewards and in satisfactory standards of leave, accommodation and welfare facilities, the career on which he has embarked is one to which he can devote a greater part of his working life than has hitherto been the case."

The Council restates its views on what is required in the Merchant Navy officer's conditions of service, apart from an adequate salary structure: Guaranteed and regular annual leave (prefaced by reasonably adequate notice); increased opportunities to share the companionship of their wives, especially on board their ships; and, in tankers, improved welfare facilities and means of transportation to and from remote loading and discharging berths, together with adequate relieving staffs to ease the strain of continuous watchkeeping and rapid turnarounds.

Among other matters dealt with in the report is the effort which is being made to secure Admiralty approval for the Union flag to be worn at the jackstaff at the stem of British merchant vessels. Its hopes in this direction have been raised by the decision to remove any considerable distinctions between the lace forming the badges of rank of Regular and Reserve naval officers. Another suggestion is that a war history of the Merchant Navy should be prepared on a national basis.

Finally, the Council has noted with concern "the continued warnings given by those best qualified to speak that the ever-increasing cost of replacing ships approaching the end of their operational lives, of which the British Merchant Navy has all too many, is rapidly approaching the point when new vessels are being ordered which cannot hope, in the normal course of events, to pay their way." The Council is confident that no British Government, of whatever political colour, can possibly fail to recognise the shipping industry's vital contribution to the maintenance of the wellbeing of the Commonwealth countries, and to the very existence of our island nation. "Your Council accordingly hopes, with the utmost sincerity, that steps will always be taken, and in good time, to ensure the provision of that efficient modern shipping, without which Britain cannot hope to maintain the place she has established in the world."

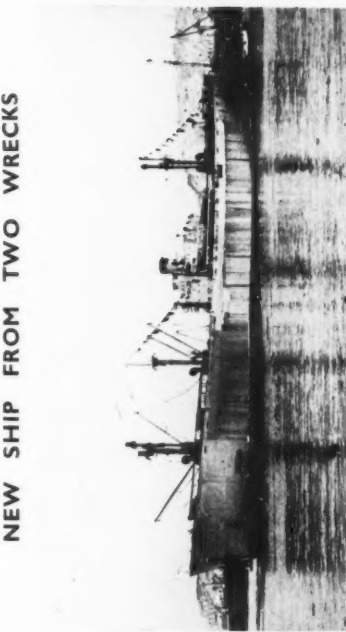
The proceeds of sales of *The Sea* (published by McKenzie, Vincent & Co., Ltd., 104 Renfrew Street, Glasgow C.2, price 2s.) will go to the Shipwrecked Fishermen & Mariners' Royal Benevolent Society. An interesting collection of articles and stories, it is edited by Commander T. C. A. H. Ouchterlony, R.N.

## NEW SHIP FROM TWO WRECKS



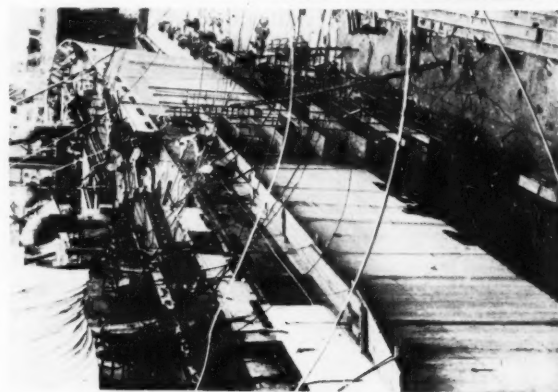
Bow part of the "Bert Williams"

A FINE EXAMPLE OF SHIP SURGERY was carried out recently by the Officine Meccaniche Navali, Campanella S.A., of Genoa. The stern half of one wrecked Liberty ship was joined to the bow portions of another to form a new ship called the *Boccadasse*. The bows of the *Nathaniel Bacon* were blown off by a mine near Civitavecchia, but her stern section was saved. The *Bert Williams* ran ashore at Mersa Matruh in 1948 and her stern portion was destroyed, but the bow section remained afloat and was towed to Taranto. The two sections were purchased by the Compagnia Industriale Marittima, of

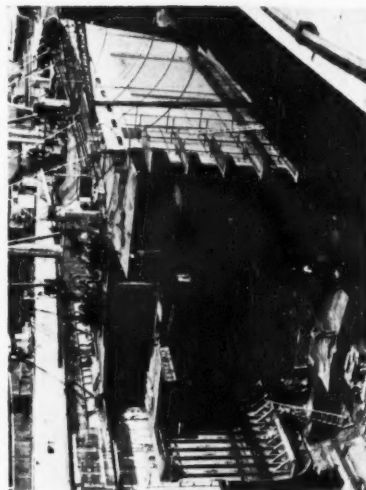
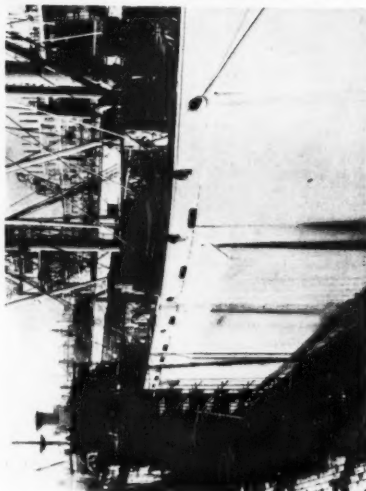


The two parts joined to form the "Boccadasse"

Genoa, and the work of reconstruction was entrusted to the Campanella concern. After a month's demolition work on the two sections, they were put in dry dock and joined together, a task which occupied nearly three months, under the direction of Dr. Angelo Casanella. Slightly more than half the length of each ship was saved, so that the *Boccadasse* now has a length of 446 ft., compared with the 417 ft. of an ordinary Liberty ship, and the carrying capacity has been increased by some 700 tons to about 11,000 tons d.w.



Stern part of the "Nathaniel Bacon"





## ROUND THE SHIPYARDS

Work in Progress in Northern Ireland

### By THE SHIPPING WORLD'S Own Correspondent

HAVING launched eight ships from Belfast in the first eight months of the year Harland & Wolff, Ltd., has reached an interval in its programme and the present month is chiefly concerned with the completion of vessels fitting out. The first of these to be delivered was the oil tanker *Tank King* (24,000 tons d.w.) for Sigurd Herlofson & Co., Oslo, the third of a series of five ships of this class propelled by the new opposed-piston type of diesel engine which the builders have had on order for Norway. The fourth, the *France Stave*, for Lorentzen's Rederi Co., is also in the water at Belfast and the fifth, the *Bollsta*, is fitting out at Govan.

Sea trials have been carried out from the Queen's Island of the 23,000 tons gross whaling factory ship *Juan Peron*, which is now awaiting delivery to the Compania Argentina de Pesca. This is the largest vessel of her kind in the world and has been fitting out since April last year. Like the Norwegian whaling ship *Thorshavet*, built by Harland & Wolff's in 1947, she is diesel engined and elaborately equipped for the processing of whales. Should the *Juan Peron* not undertake an Antarctic season this year she may be used as an oil tanker. A further ship nearing completion is the Union-Castle intermediate liner *Rhodesia Castle* (17,000 tons gross), which is due to make her maiden voyage in the round-Africa service in October. Together with her sister ship *Kenya Castle*, she has absorbed many of the men in the ship-fitting trades in recent months. Much work has also been given by the Port liner *Port Nelson*, of 8,000 tons gross, which has a large refrigerated capacity.

### Naval Construction

The remaining merchant ship in the wet basins is the Australia-China Line's cargo-passenger steamer *Eastern Star*, but much activity is also taking place on board the aircraft carriers H.M.S. *Centaur* and *Bulwark*. The departure of the larger carrier *Eagle* for Liverpool, where she entered the Gladstone Dock for final examination, has released many men and enabled the completion of the other warships to be given a higher priority. During the early part of the month the British Tanker Company's new vessel *British Adventure*, built by Vickers-Armstrongs, Ltd., at Barrow as the first of the owners' new 28,000 tons d.w. class, occupied the Thompson Dock at Belfast, and later sailed for her trials in the Firth of Clyde. Another ship of this series, to be named the *British Skill*, is under construction in the Musgrave yard at Belfast and is due to be launched within the next six months.

Three of the building berths vacated by recent launches have now been re-employed. In the Victoria and Abercorn yards the keels have been laid of two of three cargo motorships of 9,000 tons d.w. for the Andrew Weir Shipping & Trading Co., Ltd., and another slipway in the Musgrave yard is occupied by the keel of the first of four 18,000-tons d.w. oil tankers for the Anglo-Saxon Petroleum Co., Ltd. The remaining vacant berth in this yard is understood to be reserved for the passenger liner of 28,000 tons ordered by the Peninsular & Oriental Steam Navigation Company earlier in the year. One of the several large tankers on the order book will be allocated to the Queen's yard, where a berth is also available. The overhaul has been completed of the Panama Transport Company's tanker *Esso Syracuse*.

WORK has started on the construction of the largest ship ever built by Blyth Dry Docks & Shipbuilding Co., Ltd. The vessel, an 18,000 tons tanker, is the first of two ships for the British Oil Shipping Co., Ltd. A start has also been made on the first of two 1,500-tons Admiralty Fleet oil tankers. The two 10,000-tons ore carriers ordered from the yard by the Australian Government will be steamships with engines aft.

## RECENT TECHNICAL DEVELOPMENTS

### New Diesel Starting System

A NEW and simple compressed air-powered apparatus that offers many advantages over conventional mechanical methods of starting medium-sized diesel engines has just been developed by the Hymatic Engineering Co., Ltd., of Redditch, Worcs. The complete unit consists of an engine driven compressor, an air storage tank, a distributor and a series of injector valves mounted one on each of the cylinders. From the tank a feed pipe passes through a master on/off cock to a T junction, the crosspiece of which continues as the main air trunk to the cylinder head injector valves, while the right-angled branch—in smaller diameter piping—leads off to the distributor mounted either on the end of a cam or the crank-shaft, according to the engine. Small bore piping connects the distributor to the injectors.

Air at 550 lb. per sq. in. enters the feed pipe from the storage tank and passes along the main trunk to the injectors and down the branch line to the distributor. Air in the branch pipe is then routed by the distributor along one of the relay pipes to one of the injectors, where it enters the valve and forces down a piston which, opening the valve head, allows air from the main trunk line to pass into the engine cylinder. By the time the cylinder's power stroke is complete, the distributor disc has rotated and the pressure in the relay pipe is exhausted to atmosphere. The injector valve then closes cutting off the flow of air from the main trunk, the actual closing load being carried by a return spring. Meanwhile the compressed air in the engine cylinder escapes through the normal exhaust boring to atmosphere. The distributor disc rotating continuously has already reached the point where the whole cycle has begun with the next cylinder.

With the appropriate distributor the new starter can cater successfully for all oil engines with four or more cylinders. In each case, however, the distributor consists essentially of a revolving hardened-steel disc lapped perfectly flat rotating on a spindle running in Olite bushes against a distributor face—lapped equally flat—at one end of the cast iron main body. The injector valve body with its stepped bore is also an iron casting. The piston and valve head, however, are of steel. Provision has been made for lifting the main valve when necessary and rotating it so that any foreign matter that may have become trapped in its seat can be cleared without the necessity of strimming the valve down. The system is already in use on many special engines and will be fitted as standard on a new commercial series shortly to be introduced by H. Widdow & Co., Ltd., of Keighley.

### Portable Sound Reproduction Equipment

A portable sound reproduction installation has been introduced by Rees Mace Marine, Ltd. It consists of an 8-watt amplifier, two 12-in. loudspeakers with 100 ft. leads, a microphone and a gramophone unit. The whole unit (Installation type 34) operates on 100 volts D.C., and is thus suitable for ships with 110-volts installations. It is priced at £110. These outfits are being used in H.M. troop transports, where they can be taken easily from one part of the ship to another for concert parties, boxing matches, etc. The outfit is very suitable for smaller vessels, such as Channel steamers and pleasure craft. Rees Mace Marine, Ltd., also manufacture a portable installation Type 33, which is similar to Type 34, but operates on 200/230 volts AC/DC, and costs £99 complete. All the units of the equipment are designed for arduous conditions at sea and are finished in grey crackle cellulose.

## RECENT PUBLICATIONS

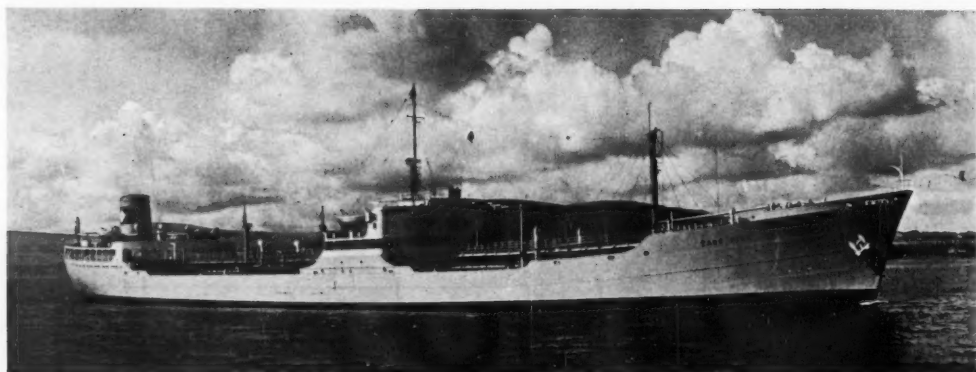
The current issue of the *Sulzer Technical Review* contains an article considering the possibilities of direct and geared propulsion in diesel-engined ships.

The September issue of *The P.L.A. Monthly* carries special articles on "London's Shipping and South Africa," by Eric Rosenthal, and "'Thames' Steamships," by T. A. Bushell.

The summer number of *BICC Bulletin*, published by British Insulated Callender's Cables, is a Festival of Britain number, and illustrates the many ways in which the firm's products contribute to its success.

The current edition of the Port of Colombo *Quarterly Review* contains a short history of the Harrison Line. It also contains the first of a series of articles which will review the progress of the major reconstruction scheme in the port.





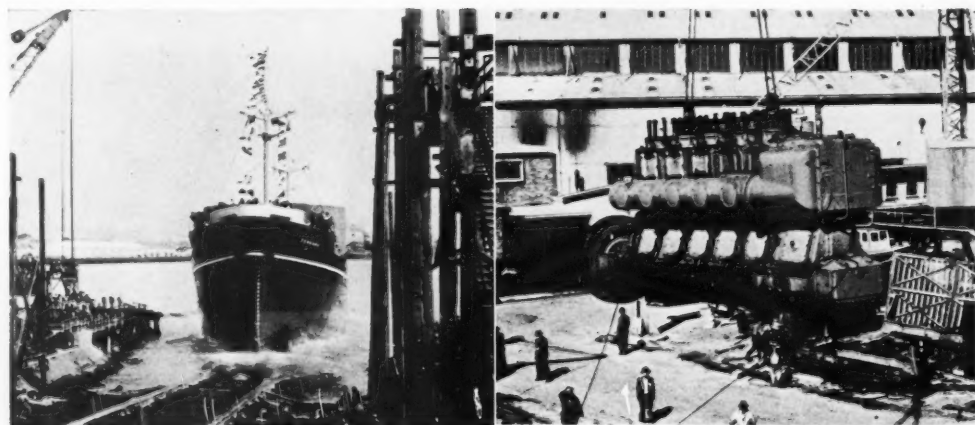
**Belfast-Built Tanker for Norway**

The single-screw motor tanker *Tank King*, the latest of a series of tankers which Harland & Wolff, Ltd., is building for Norwegian owners, has been completed at the Belfast yard and handed over to Sigurd Herlofson & Co., Oslo. Of about 16,500 tons gross, the vessel has a deadweight of about 24,000 tons, while her dimensions are 623 ft. 6 in. length o.a., 580 ft. b.p., 78 ft. breadth moulded and 42 ft. 6 in. depth moulded to upper deck. The main engine has been supplied by the shipbuilders and consists of a 7-cylinder two-stroke single-acting B. & W. diesel



**Motor Tanker  
"Matsushima Maru"**

Of 11,965 tons gross, the single-screw motor tanker *Matsushima Maru* has been built for the Nippon Suisan Kaisha, Ltd., by the Hitachi Shipbuilding & Engineering Co., Ltd., Sakurajima. With dimensions of 570.6 ft. length o.a., 541.37 ft. b.p., 70.57 ft. breadth moulded and 39.37 ft. depth moulded, the vessel has a deadweight of 18,245 tons on a draught of 30.33 ft. She has a cargo oil capacity of 24,193 cu. m. The main engine, supplied by the Kawasaki Dockyard Co., Ltd., comprises a 7-cylinder two-stroke double-acting diesel, developing 7,700 b.h.p. and providing a speed of about 15 knots



**Passenger Motorship "Dongara"**

The single-screw motorship *Dongara*, claimed to be the first sea-going passenger vessel built in Australia for many years, is designed specially for the Perth-Broome service. Built at the New South Wales State Dockyard, Newcastle, N.S.W., for the Government of Western Australia, the *Dongara* is one of a series of "D" class passenger ships. These vessels are intended for inter-state trading between the smaller ports and are fitted with British Polar diesel engines. The picture above, on the right, shows one of the two main engines being installed in the *Dongara*. Seen in the picture on the left leaving the ways of the shipbuilding yard, the *Dongara* is a vessel of about 2,300 tons gross and has dimensions of 270 ft. length, 46 ft. breadth and 21 ft. 6 in. depth to upper deck, the load draught being 18 ft. 9 in. The propelling machinery consists of two 5-cylinder four-stroke single-acting diesel engines with electro-magnetic couplings single-reduction geared to a single shaft. Supplied by British Polar Engines, Ltd., the engines develop a total of 1,820 b.h.p. at 130 r.p.m. and provide the vessel with a speed of 12 knots

## NEW CONTRACTS

## Yards in Great Britain and Northern Ireland

Shipowners	No. of Ships	Type	Approximate Tonnages		Dimensions (ft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
			Gross	Deadweight						
U.S. Govt. (on behalf of Marine Dept., Burma) under E.C.A. John Kelly, Ltd.	1	Suction hopper dredger	—	—	—	—	Tw.-scr. recip. steam	—	Shipbuilders	Fleming & Ferguson
Chr. Salvesen & Co.	1	Cargo	—	1,500	—	10	Recip. steam	—	Aitchison, Blair	Jas. Lamont
Chr. Salvesen & Co.	1	Cargo	—	1,500	215 x 35	—	Diesel	960	British Polar Engines	Clelands (Successors)
Vacuum Oil Co.	1	Coastal tanker	—	—	205 x 32.5	—	Diesel	850	British Polar Engines	Clelands (Successors)
A.S. Bergens Kulkompagni, Bergen	1	Tanker	—	4,000	—	—	—	—	—	Grangemouth Dockyard Smith's Dock
Commonwealth and Foreign Yards										
Th. Brovigs Rederi, Farsund	2	Cargo liners	—	3,800 (each)	—	14.75	—	—	—	Oresundsvarvet, Landskrona
A/S Thor Dahl, Sandefjord	1	Tanker	—	16,500	—	—	Diesel	—	—	Framnaes M.V., Sandefjord
Cie. Financiere Belge des Petroles, Brussels	1	Tanker	—	29,500	643.1 x 84.7	16.5	—	—	—	S.A. John Cockerill, Hoboken
Rederi A.B. Svenska Lloyd, Gothenburg	2	Cargo	—	500 (each)	—	9.5	6-cyl. B. & W.-Alpha diesel	360	—	Lubecker Masch. Ges.
Brodrene Olsen A/S, Stavanger	1	Tanker	—	24,000	—	—	—	—	—	Kockums M.V., Malmo
Hafen-Dampfs. A.G., Hamburg	1	Passenger ferry	—	—	98.1 x 23.63	10	Diesel-electric	—	—	H. C. Stucklen, Sohn, Hamburg
Hafen-Dampfs. A.G., Hamburg	2	Passenger ferries	—	—	8.73 (draught)	9	Diesel-electric	—	—	Werft Johan Oetker, Hamburg, and Ottensener Eisenwerke, Hamburg (1 each)
E. B. Asby's Rederi A/S, Oslo	1	Cargo	—	4,500	—	—	Diesel	—	—	Ekensbergs Varv, Stockholm

## LAUNCHES

## Yards in Great Britain and Northern Ireland

Date	Shipowners	Ship's Name and/or Yard No.	Type	Approximate Tonnages		Dimensions (ft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
				Gross	Deadweight						
—	British owners	—	Four articulated barges	—	—	—	—	—	—	—	Clelands (Successors)
Commonwealth and Foreign Yards											
July 2	Sank-Kisen K.K.	Ginko Maru	Cargo	5,000	7,200	396.1 o.a. and 369.1 b.p.	14.9	Double-red. turbines	3,000	—	Hitachi S. B. & Eng. Co., Sakurajima
Aug. 11	Cie. Chérifienne d'Armement	Rharb	Cargo	—	1,400	268 o.a. and 246.1 b.p.	12.5	Polar diesel	1,550	—	Solvesborgs Varv
Aug. 12	H. E. Horn, Hamburg	Hornsund	Cargo	4,800	8,200	14.5	15	M.A.N. diesel	—	—	Deutsche Werft, Finkenwerder
Aug. 16	Seastrain Lines, Inc.	Seastrain Georgia	Train ferry	8,300	9,000	483 x 63.5	—	Steam turbines	8,000	—	Sun S.B. & D. D. Co., Chester, Pa.

## TRIAL TRIPS

## Yards in Great Britain and Northern Ireland

Date	Shipowners	Ship's Name and/or Yard No.	Type	Approximate Tonnages		Dimensions (ft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
				Gross	Deadweight						
Sept. —	Union S.S. Co. of N.Z.	Kokiri (400)	Cargo	2,485	3,100	290 b.p. x 43	11	Tw.-scr. 5-cyl. 2-str. Atlas Polar diesel	1,450	British Polar Engines	Henry Robb
Sept. 5	Thos. & Jas. Harrison	Wanderer (790)	Cargo	8,150	10,000	460 o.a. x 59.5	12.5	Sin.-scr. 4-cyl. diesel	—	Shipbuilders	Wm. Doxford
Sept. 6	Hvalfanger, Polaris A.S., Nanset	Pol XV (828)	Whale catcher	580	—	169.5 o.a. and 147.66 b.p.	—	Fredrikstad steam motor	—	Shipbuilders	Hall, Russell
Sept. 10	United Whalers (1439)	Setter VII (1439)	Whale catcher	586	—	153 x 29.6	—	Steam motor	—	Rankin & Blackmore	A. & J. Inglis
Sept. 11	Rafen & Loennechen, Tonsberg	Buesten (1797)	Tanker	10,350	15,000	500 b.p. x 65.5	13	Sin.-scr. 5-cyl. 3-str. Doxford diesel	5,100	Wallsend Shipway & Eng. Co.	Swan, Hunter & Wigham Richardson, Wallsend
Commonwealth and Foreign Yards											
—	H. Fokkens, Groningen	Betty	Coaster	339	590	158.9 x 26.4	11	6-cyl. 4-str. diesel	395	Klockner-Humboldt-Deutz A.G. Koln-Deutz	Scheeps. Unie, Groningen
—	Cia. Siciliano di Armamento	Ercto (215R)	Cargo	6,850	11,000	444.6 x 62.5	14	2-str. Fiat diesel	6,600	—	Cant. del Tirreno, Riva Trigoso
—	Soc. Francaise de Transports Petroliers	Orleanais	Tanker	11,600	17,150	548 o.a. and 530 b.p.	14	Sin.-scr. 5-cyl. 2-str. Doxford diesel	5,000	Shipbuilders	Wilton-Fijenoord N.V., Schiedam
—	Roland Linie Schiffs.	Ruhrstein	Cargo	2,700	4,700	392.4 o.a. and 360.9 b.p.	12	M.A.N. diesel	2,400	Shipbuilders	Bremer Vulkan, Vegesack
—	Cie. de Transports Oceaniques (626)	Torao	Cargo liner	4,700	7,300	433 o.a. x 59	15.5	Sin.-scr. 8-cyl. 2-str. diesel	5,600	Sulzer Bros., Winterthur	Werf de Noord Alblasdendam
Aug. —	Afrikanische Frucht Cie.	Perseus (5.627)	Fruit carrier	3,000	3,500	414.16 x 50.83	15	6-cyl. M.A.N. diesel	4,100	—	Deutsche Werft
Aug. 23	Ove Skou A/S, Copenhagen	Benny Skou (707)	Cargo	4,248	6,950	417.66 o.a. and 390 b.p.	17.5	Sin.-scr. 8-cyl. 2-str. diesel	7,000	Shipbuilders	Burmeister & Wain, Copenhagen
Sept. 4	Zim Israel Nav. Co.	Rimau (281)	Cargo	2,300	3,998	352.6 x 46.6	14	Sin.-scr. 10-cyl. 2-str. diesel	3,000	M.A.N., Augsburg	Rotterdam D.D. Co.



#### Powell Duffryn Appointments

SUBSEQUENT to the retirement due to ill health of Mr. J. P. Stephenson Clarke, Mr. E. W. Ganderton has been appointed to succeed him as chairman of Stephenson Clarke, Ltd., and Associated Coal & Wharf Companies, Ltd., and as a member of the management committee of the Powell Duffryn board, and Sir Henry Wilson Smith has been appointed a director and vice-chairman of Stephenson Clarke, Ltd., and has joined the board of Associated Coal & Wharf Companies. Both Mr. Ganderton and Sir Henry Wilson Smith are full time directors of Powell Duffryn, Ltd. Mr. Ganderton (left) was appointed financial secretary to Stephenson Clarke, Ltd., in 1924, becoming a director when the company became associated with Powell Duffryn, Ltd., in 1928. In 1940 he was one of the architects and an original director of Associated Coal & Wharf Companies. He became vice-chairman of Stephenson Clarke, Ltd., in 1948. Mr. Ganderton is a director of several other companies. Sir Henry Wilson Smith (right), prior to his appointment to the board of Powell Duffryn, Ltd., served in the Civil Service, being Treasury Under-Secretary in 1942-46 and permanent head of the Ministry of Defence in 1947-48. He is also a director of other companies.



## MARITIME NEWS IN BRIEF

From Correspondents at Home and Overseas

**A**N UNNAMED Hamburg bank has advanced 3,000,000 marks (£230,000) to finance the first stage of rebuilding the Blohm & Voss shipyard, Hamburg. It is estimated that a total of 50,000,000 marks will be required to rebuild the yard completely. The reconstruction is being carried out in three stages, the first stage permitting the construction and repair of engines and boilers. The second stage would provide dock installations and slipways, and the final stage would provide all the other necessary equipment for building vessels. The second-stage depends on the lifting of the Allied Control Council Law No. 24, which prohibits the repair and construction of dock installations and slipways in the Blohm & Voss area.

THE death has occurred of Cmdr. F. G. Loring, director of the International Marine Radio Co., Ltd., and a Younger Brother of Trinity House. Cmdr. Loring was Inspector of Wireless Telegraphy, Post Office, from 1908 to 1930, during which time he took part in the negotiations between Lloyd's and the Post Office regarding the supply of maritime intelligence to the Corporation.

PRESENTATIONS were made last week by the Scottish Committee of Lloyd's Register of Shipping to Dr. George Webster, principal surveyor for Scotland, who retires at the end of this month after 37½ years' service with the Register. Many other tributes were also paid to the work of Dr. Webster.

A FURTHER 55 vessels were withdrawn from the United States reserve fleet during August, bringing the active ocean-going merchant fleet of the United States to 1,799 vessels. There are now 1,597 vessels remaining in the reserve fleet, including 32 ships classified as over age.

PRIZES will be presented by Viscount Runciman, vice-president of the Chamber of Shipping, to boys of the London Nautical School in the County Hall, Westminster Bridge, London, S.E.1, at 7 p.m. on September 25.

**T**HE 17,300 tons gross passenger liner *Rhodesia Castle*, completing at Belfast by Harland & Wolff, Ltd., is scheduled to leave London on October 18 on her maiden voyage in the Union-Castle Line's "Round Africa" service. The outward voyage to Cape Town will be via the west coast of Africa, returning by way of the Suez Canal and the Mediterranean. The whole voyage will take about 10 weeks and the ship will call at 20 different ports. Accommodation for 530 passengers will be provided in one class, the fares from London to Cape Town ranging from £37 to £100.

MR. R. W. TAYLOR has been appointed product sales manager of the Nelson stud welding service of Compton Parkinson, Ltd., in succession to Mr. R. V. Powditch, who, as previously announced, becomes product sales manager, Compton Parkinson F.I.P. motors. The appointment comes into effect on October 1. Mr. Taylor was previously sales manager to Cye-Arc, Ltd.

SALVAGE operations are being carried out further to reduce the danger to shipping of the wreck of the tanker *British Officer*, lying at the mouth of the Tyne. The vessel sank in 1940 and the forepart was broken up. The after section is buried in the river bed and most of the shipping entering the river can pass over it.

THE appointment is announced of Mr. R. C. Franklin as the company's representative at the West End passenger office of Royal Mail Lines, Ltd., Cocksour Street, London, W.1, in succession to Mr. A. E. Gummer, who is to retire at the end of September.

COAST LINES, LTD., announce the appointment of Mr. J. R. Doughty as manager at Leith. Mr. Doughty, previously assistant to the Glasgow manager, entered the service of the company in 1929 at Dundee.

MR. D. D. WALKER, chairman and managing director of Thomas Walker & Son, Ltd., has been elected president for the ensuing year of the British Engineers' Association.

**T**HE length of the Norwegian whaling factory ship *Kosmos IV* has been increased by 26 ft. and 1,500 tons has been added to her gross tonnage. The work, carried out at Kiel, has made it possible to install a large assembly hall which will also be used as a cinema, in addition to increasing the amount of tank space available. The reconstruction, including the conversion of propulsion from steam to diesel machinery, is estimated to have cost a total of about £600,000.

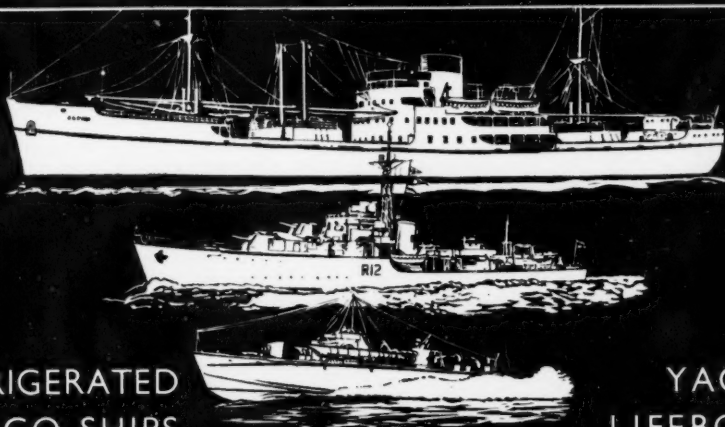
Two Japanese shipping companies, the Nippon Yusen Kaisha and Osaka Kaisha, have been authorised by the Occupation authorities to operate a monthly cargo service between Japan and Calcutta, calling on the outward voyage at Rangoon and Chittagong.

MR. E. W. ASHBY, sales engineer attached to the Liverpool branch office of British Insulated Callender's Cables, Ltd., has been elected chairman of the Mersey and North Wales Centre of the Institution of Electrical Engineers with effect from October 1.

DURING the first seven months of this year, exports from the River Wear included 4,435 tons of engines for new ships. The figure for the corresponding period of last year was 7,331 tons and for 1938, 7,485 tons.

STEEL production during August was at an annual rate of 13,853,000 tons, compared with 14,539,000 tons in August 1950. The annual rate of pig iron production during the month was 9,409,000 tons, as against 9,205,000 tons a year ago.

MR. A. N. RYLES, who has been in charge of the export side of Wm. Cory & Son, Ltd., Newcastle-on-Tyne, is retiring through ill health. He joined the company more than 30 years ago. His successor is Mr. J. R. Shaw.



REFRIGERATED  
CARGO SHIPS  
DESTROYERS

OIL FUEL EQUIPMENT

YACHTS  
LIFEBOATS  
SMALL CRAFT

HIGH SPEED VESSELS

**J. SAMUEL WHITE & CO. LTD.**

COWES,

LONDON

CB/c

## ELLERMAN LINES

*World-Wide Services*

Linking

**U.K. CANADA U.S.A.**

with

**SOUTH & EAST AFRICA  
PORTUGAL, MEDITERRANEAN,  
EGYPT, LEVANT & BLACK SEA,  
RED SEA & PERSIAN GULF  
INDIA & PAKISTAN.  
CEYLON & BURMA  
MALAYA, PHILIPPINES, CHINA & JAPAN  
AUSTRALIA & NEW ZEALAND.**

*Hall Line, Ellerman & Bucknall Line,  
City Line, Ellerman Line  
Papayanni Line,  
Westcott &  
Laurance Line,*

Head Office  
104-7, LEADENHALL STREET,  
LONDON, E.C.3  
LIVERPOOL—Tower Buildings,  
Water Street  
GLASGOW—75, Bothwell St., C.2



**World-Wide Services**

## CLAN LINE



*Let 'Clan' carry the cargo*

**FOR HEAVY LIFTS**

**FAST CARGO SERVICES**  
between **UNITED KINGDOM** and  
**SOUTH & EAST AFRICA** | **CEYLON, INDIA**  
**& PAKISTAN**

*Details from the Managers:*

**CAYZER, IRVINE & CO. LTD.**  
LONDON · LIVERPOOL · GLASGOW

# Hawthorn Leslie

R. & W. HAWTHORN, LESLIE & CO. LTD., NEWCASTLE UPON TYNE

## PASSENGER and CARGO VESSELS • TANKERS

*Doxford, Sulzer and Werkspoor  
Diesel Engines*

**Marine Turbines and  
Watertube Boilers**

*Dry Dock 502' x 66'*

## HOUSTON LINE

(British & South American Steam Navigation Co., Ltd.)

### To SOUTH and EAST AFRICA

For all information apply to:—

**HOUSTON LINE (LONDON), LIMITED**  
4, ST. MARY AXE, LONDON, E.C.3. Tel.: AVEnue 5834/5  
or John M. Lennard & Sons, Ltd., Middlesbrough.

## W. J. YARWOOD & SONS LTD.

Established 1840



THE DOCK, NORTHWICH CHESHIRE  
"Grange": "Shipyard, Northwich." Phone: 4234 (2 lines)

## THE EAST ASIATIC COMPANY LTD.

(Aktieselskabet Det Østasiatiske Kompagni)  
COPENHAGEN



### FAST FREIGHT AND PASSENGER SERVICES

Agents in the United Kingdom: United Baltic Corporation Ltd., London.  
Freight and Passenger Agents: Escombe, McGrath & Co., London, Glasgow,  
Birmingham, Liverpool, Manchester, Middlesbrough, Southampton.  
J. E. Hyde & Co., London (for Australia Line).

## VALVES.

### KINGHORN PATENT ROGLER-HOERBIGER PATENT



Kinghorn Valve.

and Disc or Plate  
Valves of every de-  
scription for Pumps,  
Air and Gas Com-  
pressors, Diesel  
Engine Scavenge  
Pumps, etc.

**THE METALLIC VALVE CO., LTD.**  
SANDFORD STREET, BIRKENHEAD

"CAMARINE" DEEP TANK PAINT "CAMREX" HOLD PAINTS

## CAMREX SUPER QUALITY PAINTS

"Camrex" Non Oxidising Preservative

FOR COATING STEEL DECKS UNDER WOOD  
TANK TOPS UNDER CEILING  
BEHIND WOOD CLEADING  
BILGES THROUGHOUT THE SHIP  
FORE AND AFTER PEAK TANKS  
WATER BALLAST TANKS ETC.

### SUNDERLAND

Telephone: 4401 (4 lines) Telegrams: "Camrex"

"CAMLAC" MARINE ENAMEL PAINT "CAMOLED" RED LEAD

"CAMERON'S" SHIPS BOTTOM COMPOSITIONS

"SUB-A-SEAL" UNDER WATER MARINE PRIMER



## Go to Gardiner's

for

Uniforms  
Battle Dress  
Caps, Badges  
Gold Lacing  
Raincoats  
Oilskins

Rubber Boots  
Boot Hose  
Overalls  
Kit Bags  
Bedding  
Blankets

**GARDINER & CO. (The Scotch House) Ltd.**  
1, 3 & 5, Commercial Road, London, E.1  
(Opposite Aldgate East Station) Phone: Bishopgate 6751/3  
ORDER BY POST—SELF MEASUREMENT FORMS SUPPLIED  
Complete Outfits for R.N. R.N.V.R. and M.N.



**CARGO FROM**  
**Hamburg, Bremen, London & East Coast U.K. Ports**  
 TO  
**U.S.A. GULF PORTS**  
**BROWN, JENKINSON & CO., LTD., 113 Fenchurch Street, E.C.3.**  
**WESTBOUND LOADING BROKERS**  
 .....  
**Galveston, Houston, New Orleans & Mobile**  
**to East Coast U.K. & North Continent**  
**by ROPNER LINE**  
**SIR R. ROPNER & CO. (MANAGEMENT) LTD.** **SIR R. ROPNER & CO. (LONDON) LTD.**  
 Coniscliffe Road, Darlington. 22 St. Mary Axe, London, E.C.3.  
 Telephone 2811. or Telephone: AVE. 2153  
**STRACHAN SHIPPING CO.—New Orleans and all U.S. Gulf Ports.**

**WILSON LINE, HULL** *Grams" WILSONS, HULL"*  
*'Phone No. 16180 (20 lines)*  
**REGULAR SERVICES**  
 From Hull, London, Liverpool, Manchester, Middlesbrough, Newcastle, Aberdeen, Swansea, Newport, Antwerp, Dunkirk, etc.; to and from Norway, Sweden, Denmark, Poland, Baltic States, Portugal, Mediterranean Adriatic & Levant Ports, Egypt, India, Pakistan, Canada & United States.  
**PASSENGERS** Passenger Services to Norway, Sweden, Denmark, Poland, Italy, United States and Canada, etc.  
**MARINE INSURANCE** Insurances arranged on Cargo by our own and other steamers to and from all ports at current rates of premium.  
 Lighter Owners Forwarding Agents, Warehouse Keepers and Sworn Weighers Bunkers supplied.  
 For Rates of Freight, Fares, Insurance, Forwarding, etc., apply to—  
**ELLERMAN'S WILSON LINE, Ltd., HULL**  
 or Branch Offices at Leeds, Sheffield, Manchester, Birmingham, Bradford and Grimsby; or London Agents—THE UNITED SHIPPING CO. Ltd., 108, Fenchurch St., London, E.C.3. London Brokers for Indian and Pakistan Trade—GELLATLY, HANKEY & CO., Ltd., Dixon House, 1, Lloyd's Avenue, London, E.C.3., or 62, Pall Mall, S.W.1.

**MOSS HUTCHISON LINE LTD.**  
 •  
**REGULAR FREIGHT SERVICES FROM LIVERPOOL AND GLASGOW TO CASABLANCA AND MEDITERRANEAN PORTS. ALSO FRANCE, SPAIN AND PORTUGAL**  
 •  
 For Freight apply to  
**MOSS HUTCHISON LINE LIMITED,**  
 30 JAMES STREET, LIVERPOOL 2.  
**GLASGOW:** **MANCHESTER**  
 95, Bothwell Street, C.2. 196 Deansgate.  
**LONDON**  
 c/o THE GENERAL STEAM NAVIGATION CO. LTD.,  
 15, Trinity Square, E.C.3.

**ROYAL MAIL LINES**  
**to SOUTH AMERICA**  
**BRAZIL • URUGUAY**  
**ARGENTINA**  
**WEST INDIES**  
**SPANISH MAIN**  
**CENTRAL AMERICA**  
**NORTH PACIFIC COAST**  
  
**ROYAL MAIL LINES, LTD.**  
 London: Royal Mail House, Leadenhall Street, E.C.3. America House, Cockspur Street, S.W.1.  
 Liverpool: The P.S.N. Co., Pacific Building, James Street, (2)

**HOULDER BROTHERS & CO. LTD.**  
 Shipowners, Insurance Brokers, Passenger & General Forwarding Agents (Sea and Air)  
**REGULAR FAST SERVICES to RIVER PLATE**  
**From Liverpool, London, Bristol Channel & Antwerp and to SOUTH AFRICA**  
 .....  
**FREIGHT ENGAGEMENTS made and goods insured and forwarded by Sea and Air**  
**TO ALL PARTS OF THE WORLD**  
**Head Office: 53, LEADENHALL STREET, LONDON, E.C.3**  
 Branch Offices at Liverpool, Glasgow, Newport (Mon.), Bristol, Swansea, Manchester, Hull, Southampton, Birmingham, Sheffield, Bradford, Hanley, Dundee, Cape Town and Sydney (N.S.W.).  
 Representatives in Argentina and Uruguay: Soc. Anon Houlder Brothers & Co. (Argentina), Ltd., Buenos Aires, Rosario, La Plata and Montevideo.  
 Brazil: Houlder Brothers & Co., Brazil, Ltd., Rio de Janeiro and Santos.

**PORT LINE**  
**FREIGHT AND PASSENGERS**  
**Regular Sailings**  
**LONDON, LIVERPOOL, NEW YORK & CANADA**  
 to  
**AUSTRALIA & NEW ZEALAND**  
**PORT LINE LTD.**  
**CUNARD HOUSE, 88, Leadenhall Street, London, E.C.3**  
 'Phone: Avenue 1270. Telegrams: "Portships Fen, London"

**UNION-CASTLE LINE**  
**to SOUTH & EAST AFRICA**  
 WEEKLY MAIL SERVICE from SOUTHAMPTON also Intermediate & East African Sailings from LONDON  
  
 Head Office:  
**3 FENCHURCH STREET, LONDON, E.C.3**  
 Telephone: MANsion House 2550 (Passenger Dept. MAN 9104)  
 West End Passenger Agency:  
**125 PALL MALL, S.W.1** WHItchall 1911


**P. S. N. C.**  
**LIVERPOOL, BERMUDA, BAHAMAS, CUBA, JAMAICA, PANAMA CANAL, WEST COAST OF SOUTH AMERICA.**  
 Also via Bahia Blanca & Punta Arenas  
**THE PACIFIC STEAM NAVIGATION CO.**  
 Pacific Building, James St., Liverpool, 2  
 London Agents: Royal Mail Lines, Leadenhall St. E.C.3  
 Freight: McGregor, Gow & Holland, Ltd.  
 16, St. Helen's Place, London E.C.3

## New Zealand Line

### ● Passenger and Cargo Services via Panama

Particulars from:— J. B. WESTRAY & CO. LTD.  
138 LEADENHALL ST., E.C.3 • Tel. (Avenue 5220)

THE NEW ZEALAND SHIPPING Co. Ltd.



*Flying between West Africa  
the Continent & Great Britain*

... the Palm Line fleet of modern cargo liners provides a frequent and reliable service for the carriage of all types of merchandise and produce.

**PALM LINE LIMITED**

UNILEVER HOUSE, BUCKLEBOARDS, LONDON, E.C.4  
AFRICA HOUSE, MERSEY ST. LIVERPOOL 1



*Regular Service  
BETWEEN ALL MAIN  
PORTS IN THE UNITED  
KINGDOM*

**COAST LINES**

ROYAL LIVER BUILDING  
LIVERPOOL  
*Telephone Liverpool 62111 and 62112*

*Seaway*

## BRITISH & CONTINENTAL STEAMSHIP CO., LTD.

AMSTERDAM. ROTTERDAM. DUNKIRK. ANTWERP. GHENT  
& TERNEUZEN from and to LIVERPOOL & MANCHESTER  
ANTWERP & GHENT from and to GLASGOW  
GHENT from and to BELFAST

### AGENTS

LIVERPOOL and MANCHESTER  
For Rotterdam, Amsterdam and Dunkirk Steamers: Wilson Son & Co.  
For Antwerp, Ghent and Terneuzen Steamers: J. T. Fletcher & Co.  
GARSTON: Ed. W. Turner & Son.  
BARROW: James Fisher & Sons, Ltd.  
GLASGOW: Clyde Shipping Co., Ltd.  
BELFAST: D. Bryn & Sons Ltd.; James Little & Co., (Belfast) Ltd.  
ANTWERP, GHENT, TERNEUZEN: John P. Best & Co., S.A.  
ROTTERDAM: P. A. Van Es & Co.; Phs. Van Ommeren (Rotterdam) N.V.  
AMSTERDAM: Van Es & Van Ommeren  
DUNKIRK: L. A. De Baecker.  
LONDON: Phs. Van Ommeren (London), Ltd., Baltic House, 27 Leadenhall Street, E.C.3  
PARIS: Phs. Van Ommeren (France) S.A., 11, Rue Tranchet, 86

## ORIENT LINE to AUSTRALIA



To  
EGYPT  
CEYLON  
AUSTRALIAN PORTS

FOR PARTICULARS APPLY: 14 COCKSPUR ST., LONDON, S.W.1 Tel: TRA 7141  
ORIENT LINE 7 BISHOPSGATE, LONDON, E.C.2 Tel: MAN 3456  
8 KINGSWAY, W.C.2 Tel: TEM 3118 or Agents

## P&O and B.I.

- From United Kingdom and Continental ports to EGYPT, ADEN, RED SEA PORTS, INDIA, PAKISTAN, CEYLON, E. & S. AFRICA, MALAYA, CHINA, JAPAN, AUSTRALIA, etc.

For details of services, fares, etc., apply—

P. & O., 122, Leadenhall St., E.C.3. ● 14, Cockspur St. S.W.1  
● 9, Kingsway, W.C.2 ●  
B. I. (Agents: Gray Dawes & Co.), 122, Leadenhall St., E.C.3

## BIBBY LINE

UNITED KINGDOM, CONTINENT,  
MARSEILLES, EGYPT SUDAN, CEYLON  
AND BURMA

All enquiries to —

BIBBY BROTHERS & CO., Martins Bank Building, Water Street, LIVERPOOL, 2.

## Shaw Savill Line



● SOUTH AFRICA

● AUSTRALIA

● NEW ZEALAND

HEAD OFFICE:  
88, Leadenhall St., London, E.C.3

PASSENGER OFFICE:  
11a, Lower Regent St., London, S.W.1

## THE BANK LINE

OPERATING THE FOLLOWING SERVICES

AMERICAN AND INDIAN LINE—Calcutta, Chittagong, Rangoon and Colombo to Halifax Boston, New York, Philadelphia Baltimore and Norfolk (Va.).

AMERICAN AND INDIAN BRANCH LINE SERVICE—Rangoon, Chittagong, Madras, Madras Coast, Colombo and Malabar Coast, (filling up if necessary at Aden and Port Sudan) to Halifax, Boston New York, Philadelphia, Baltimore and Norfolk (Va.).

BOMBAY AMERICAN LINE—Bombay to New York and Philadelphia.

AMERICAN AND ORIENTAL LINE—U.S. Atlantic and Pacific Coast ports to Philippines, Hong Kong, Shanghai, Japan, Indonesia and Malaya, returning to Canada and U.S.A. via Suez Canal.

CALCUTTA to RIVER PLATE PORTS—Chittagong, Calcutta and Other Indian Ports. Colombo and Malabar Coast to Brazil Montevideo, Buenos Aires, Rosario and Bahia Blanca.

INDIAN CHILEAN LINE—Calcutta, Chittagong, Rangoon, Singapore and Indonesia to West Coast of South American ports. Calling at Colombo and Cochin when opportunity offers.

INDIAN AFRICAN LINE—Carrying passengers and cargo from INDIA-NATAL LINE / Rangoon, Chittagong, Calcutta, other Indian ports and Colombo to East and South African ports and vice versa. (Vessels of the India-Natal Line also call at Madagascar when opportunity offers.)

ORIENTAL AFRICAN LINE—Carrying passengers and cargo from Japan, Shanghai, Hong Kong, Philippines, Borneo, Saigon, Bangkok and Malaya to Mauritius Reunion East and South African ports and vice versa.

U.S. GULF to AUSTRALASIA—Regular sailings from all U.S. Gulf ports to all ports in Australia and New Zealand. Calling at Trinidad en route when sufficient inducement offers.

U.S. GULF to SOUTH AFRICA—U.S. Gulf ports to South and East African ports.

PERSIAN GULF—General Merchants, Export, Import and Ship Agents.

For Freight and Particulars apply to—

### ANDREW WEIR

SHIPPING & TRADING CO., LTD.

19-21, BURY STREET, LONDON, E.C.3.

## ANGLO BALTIC LINES

U.K. PORTS

to

GDYNIA/GDANSK & FINNISH PORTS

also

KLAIPEDA (Memel) LIEPAJA (Liban)

RIGA and TALLINN

when conditions permit, and sufficient inducement offers.

For further particulars apply to—

UNITED BALTIC CORPORATION, LIMITED,

15B, Fenchurch Street, London, E.C.3

Telegrams "Orientesko," London  
Telephone No.: Mansion House 3311 (8 lines)

## MAC ANDREW LINE

SPAIN AND MOROCCO

Regular Services from LONDON, LIVERPOOL and Principal U.K. Ports

Express Service by fast Motorships from  
LONDON and LIVERPOOL to BARCELONA

HALL'S LINE To LISBON and GIBRALTAR

Express Service by fast Motorships from LONDON to GIBRALTAR

GLYNN LINE To WEST ITALY and SICILY

For Freight and Passage apply to—

MACANDREWS & CO., LTD.,

Plantation House, Mincing Lane, London, E.C.3.

Telephone: MANSION HOUSE 1543

Cunard Building, Water St., Liverpool, 3 Tel: CENTRAL 3922

BRANCH HOUSES at \*Barcelona, \*Madrid, \*Tarragona

\*Castellon, \*Barriona, \*Valencia, \*Gandia, \*Denia

\*Carthage, \*Almeria, \*Malaga, \*Seville and Bilbao

Branches with \* act as Lloyd's Agents.

Agencies in all other principal ports

## FURNESS LINES

### FURNESS LINE

London to Philadelphia and New York.

### FURNESS WEST INDIES LINE

New York to U.S. Virgin Islands, British & French West Indies, Venezuela and Trinidad.

Newfoundland and Canada to U.S. Virgin Islands, British & French West Indies, Venezuela & Trinidad.

### FURNESS RED CROSS LINE

New York to Saint John, N.B./Halifax, N.S./ St. John's and Corner Brook, N.F.

### FURNESS-WARREN LINE

Liverpool to St. John's, Newfoundland, Halifax, N.S., and Boston.

### FURNESS PACIFIC SERVICE

Manchester to Los Angeles, San Francisco, Victoria and Vancouver, B.C., via Panama Canal.

Loading Brokers:—Manchester Liners Ltd. Manchester 2.

### FURNESS BERMUDA LINE

New York to Bermuda.

### JOHNSTON WARREN LINE

Antwerp, Hamburg and Liverpool to Piraeus, Volo, Thessaloniki, Izmir. Haydar Pasha, Istanbul, Black Sea, Roumanian and Danubian Ports.

For further information apply:—

### FURNESS WITHY & CO., LTD.,

Furness House, Leadenhall Street, London, E.C.3.

Also at LIVERPOOL, GLASGOW, LEITH, MIDDLESBRO' AND NEWCASTLE.

### PRINCE LINE

CANADA & U.S.A.—BRAZIL—RIVER PLATE—BRAZIL

TRINIDAD — U.S.A. & CANADA

U.S.A. — SOUTH & EAST AFRICA — U.S.A.

U.S.A. — FAR EAST — E. CANADA — U.S.A.

U.K. — MEDITERRANEAN — U.K.

ARGENTINA & URUGUAY — U.K.

For further information apply—

PRINCE LINE LTD. :: 56, Leadenhall St., E.C.3.

## TO HELP BRITISH MERCHANT SEAMEN PLEASE HELP THE "ROYAL ALFRED" MERCHANT SEAMEN'S SOCIETY

Patron: H.M. The King. Incorporated by Royal Charter, dated May 3rd, 1950. (Formerly: The Royal Alfred Aged Merchant Seamen's Institution)

It gives a home Outpension to British Merchant Navy Officers and men, and supports their widows and dependents.

It has more than 2,200 regular beneficiaries, including many War Sufferers. The work of the Royal Alfred is widespread over the United Kingdom, and is dependent upon Voluntary Contributions. (Established 1845)

"ROYAL ALFRED" MERCHANT SEAMEN'S SOCIETY (Dept. "S.W."), 76-85 IBEX HOUSE, MINORIES LONDON, E.C.3

## NORTH OF ENGLAND PROTECTING, INDEMNITY & WAR RISKS ASSOCIATION

(Established 1860)

*The Association covers Shipowners in—*

Class I.—PROTECTING—Against claims for one-fourth damage done to other ships or vessels, damage to structures, loss of life, personal injury, etc.  
Class II.—INDEMNITY—Against liabilities arising in connection with cargo, &c.  
Class III.—WAR RISKS—Hull and Machinery, &c.  
Class IV.—WAR RISKS—Freight, Disbursements, &c.

The interests of Members are safeguarded at the principal ports in the World by official Legal Representatives and Nautical Experts, who have full instructions to act and to assist Masters in the case of need.

Principal Office: NEWCASTLE-UPON-TYNE: Collingwood Buildings  
Branch Offices: GLASGOW—134, St. Vincent St., C.2. CARDIFF—The Exchange, Mount Stuart Square. LONDON—24, St. Mary Ave, E.C.3. LIVERPOOL—123, Derby House, Exchange Buildings.

LESLIE MANN, Chairman. J. W. TODD, General Manager  
J. W. DUNCAN, Vice-Chairman

## ADMIRALTY CHARTS

The LATEST EDITIONS of Charts,  
Plans and Sailing Directions  
published by the Hydrographic  
Dept., can be obtained from

**J. D. POTTER,** Admiralty Agent for Charts,  
Publisher of Nautical Books,  
and Bookseller.

145, MINORIES, LONDON, E.C.3. (Tel.: Royal 1369)

Large Stocks of Nautical and Technical Books of all descriptions.

## REVERSING ENGINES

DIRECT ACTING FIXED AND OSCILLATING  
TYPES WITH PUMP AND CHANGE COCK  
OR RACK AND PINION HAND GEAR.

**MACTAGGART, SCOTT & CO., LTD.**

Contractors to British and Foreign Admiralties.

LOANHEAD—EDINBURGH  
London J. M. EDMISTON, 31-33, Bishopsgate, E.C.2.

Efficiently equipped for  
timber, wood pulp  
and all  
cargoes

**PORT OF PRESTON**

Quick  
Despatch

Bunkering Facilities

Write: H. J. Hanna,  
General Traffic Manager, Preston

### SITUATIONS VACANT

A FULLY qualified practical senior Ship Designer or Chief Draughtsman is required at once by a firm of ship and boat builders situated in eastern England. Applicants should have served a full shipyard apprenticeship and have experience in the construction of various types of steel vessels up to at least 200 ft. long. They should also hold first class technical qualifications in naval architecture, and have subsequent practical and drawing office experience. Special consideration would be given to applicants proving their qualifications to design and produce construction drawings for fishing vessels, tugs, small tankers, and similar craft. Practical and technical experience in welding will be deemed an additional qualification.

The post offered will carry an adequate salary and excellent prospects for applicants with the qualifications and ability to take full executive responsibility. Participation in the Company's Superannuation Scheme will be available after 12 months' satisfactory service. Applications will be treated in strict confidence, and should give in chronological order full details of technical and practical training, subsequent experience, present position, remuneration and age. Applications to Box No. 213, THE SHIPPING WORLD LTD., 1, Abchurch Lane, London, E.C.4.

### FOR SALE

UNBERTHED passenger vessel having following particulars for sale: Built 5/1949. Dimensions 150 ft. by 29 ft. by 10.25 ft. to main deck and 17.75 ft. to shade deck, gross tonnage 390, net tonnage 209, class Lloyd's 100. All plus, deadweight 241 tons on 8 ft. draft, hold capacity 15,768 cu. ft. single screw, triple expansion reciprocating engine, 485 I.H.P., speed 9.10 knots on 12 1/2 tons Indian coal, cabin passengers 10, deck passengers 431 under Class VIII of Indian Merchant Shipping Life-saving Appliances Rules, with class maintained, delivery Calcutta, October 1951. Price £157,500 payable in Indian currency or equivalent sterling. Reply Box No. 214, THE SHIPPING WORLD LTD., 1, Abchurch Lane, London, E.C.4.

### INDEX TO ADVERTISERS IN THIS ISSUE

	Page		Page		Page
Anderson, Green & Co., Ltd.	A18	Everard, F. T. & Sons, Ltd.	A14	Pacific Steam Navigation Co.	A17
Anglo-Baltic Lines	A19	Frigidaire, Ltd.	A8	Palm Line, Ltd.	A18
Anglo-Iranian Oil Co., Ltd.	A11 & A14	Furness Withy & Co., Ltd.	A19	P. & O. and B. I. Companies	A18
Bank Line	A19	Gardiner & Co. (The Scotch House), Ltd.	A16	Port Line, Ltd.	A17
Bibby Brothers & Co.	A18	Gray, William & Co., Ltd.	A12	Potter, J. D.	A20
Blundell & Crompton, Ltd.	A21	Hall Brothers	A21	Pratt, Port of Authority	A20
British & Continental Steamship Co., Ltd.	A18	Hawthorn, R. & W., Leslie & Co., Ltd.	A16	Prince Line, Ltd.	A19
Brown, A. & R., Ltd.	A21	Houlder Brothers & Co., Ltd.	A17	Ropner, Sir R. & Co., (Management) Ltd.	A17
Brown, John, & Co., Ltd.	A13	Houston Line (London), Ltd.	A16	"Royal Alfred" Merchant Seamen's Society	A20
Cable Makers Association	A5	Kango Electric Hammers, Ltd.	A3	Royal Mail Lines, Ltd.	A17
Cammell Laird & Co., Ltd.	Back Cover	Kwells	A19	Saunders-Roe (Anglesey), Ltd.	A6
Camrex Paints, Ltd.	A15	MacAndrews & Co., Ltd.	A19	Shaw Savill & Albion Co., Ltd.	A18
Cayzer Irvine & Co., Ltd.	A15	MacGregor & Co. (Naval Architects), Ltd.	A12	South American Steamship Co., Ltd.	Front Cover
Cian Line	A2	MacTaggart Scott & Co., Ltd.	A4	Submarine Signal Co. (London), Ltd.	A7
Clenzol, Ltd.	A18	Manchester Ship Canal Co.	A2	Sunderland Forge & Engineering Co., Ltd.	A12
Coast Lines, Ltd.	A14	Mann, George & Co., Ltd.	A16	Superheater Co., Ltd.	A9
Cork Manufacturing Co., Ltd.	A11	Moss Hutchinson Line, Ltd.	A17	Union-Castle Mail Steamship Co., Ltd.	A17
Cory, Wm. & Son, Ltd.	A7	New Zealand Shipping Co., Ltd.	A18	United Baltic Corporation Ltd.	A19
Coventry Victor Motor Co., Ltd.	A4	North of England Protecting Indemnity & War Risks Association	A20	Wair, Andrew, Shipping & Trading Co., Ltd.	A19
Dreadnought Fireproof Doors (1930), Ltd.	A4	Orient Line	A18	Westminster Bank, Ltd.	A6
Engle Aviation, Ltd.	A6			White, J. Samuel & Co., Ltd.	A15
East Asiatic Co., Ltd.	A16			Whites Shipyard (Southampton), Ltd.	A21
Ellerman Lines	A15				
Ellerman's Wilson Line, Ltd.	A17				



**SHIPBUILDING  
SHIP REPAIR**

**WHITES  
SHIPYARD**  
ITCHEN - SOUTHAMPTON

Repair Work and Conversions. Slipways up to 1,200 tons dead-weight. Mud and wet Berths to accommodate vessels of 2,000 tons.

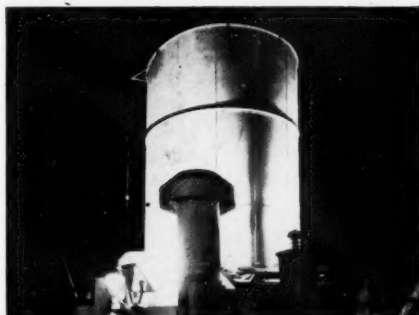
Repairs to larger vessels undertaken in the seven dry docks available to all shipowners of Southampton.

Seven Building Berths for vessels up to 200 ft. long.

*Fixed price quotations*

**WHITES SHIPYARD (Southampton) LTD.**  
Telephone: Southampton 88225

**FLOODLIGHTING FUNNELS, Etc.**



**SPECIALLY DESIGNED PROJECTOR**  
WHICH CAN BE PLACED WITHIN 5' to 6' OF  
THE FUNNEL GIVING AN EVEN LIGHT OVER  
THE WHOLE FUNNEL.

*Economical and Efficient*



**A. & R. BROWN LTD.**  
Makers  
90 REGENT ROAD,  
Liverpool



Reg. Design No. 857407

ESTABLISHED 1825

**BLUNDELL & CROMPTON  
LIMITED**

**ENGINEERS : SHIP REPAIRERS  
COPPERSMITHS : FOUNDERS Etc.**

Telephone: East 3838 (3 lines) & 1408  
Telegrams: Blundell, 'Phone, London



Specialists in  
**URGENT HULL AND ENGINE REPAIRS**

*Sole Manufacturers:*  
**BLUNDELL 'ATMOS' VALVES  
CROMPTON ASH HOISTS**

**WEST INDIA DOCK ROAD, LONDON, E.14**  
Branch Works: TILBURY DOCKS, ESSEX. Telephone: Tilbury 33

**HALL BROTHERS**  
**NEWCASTLE UPON TYNE**

*Steamship Owners, Brokers and  
Insurance Brokers*

BUNKERS SUPPLIED

*Passenger and Forwarding Agents*

*General Agents for*

**BLUE STAR LINE  
LAMPORT & HOLT LINE  
BOOTH LINE  
WHIMSTER CONSTANTINE LINE**

*Freight Agents for*

**SCINDIA STEAM NAVIGATION CO.**

*Passengers Agents for*

**CANADIAN PACIFIC RAILWAY CO.  
HOLLAND AMERICA LINE  
UNITED STATES LINES  
Etc., Etc.**

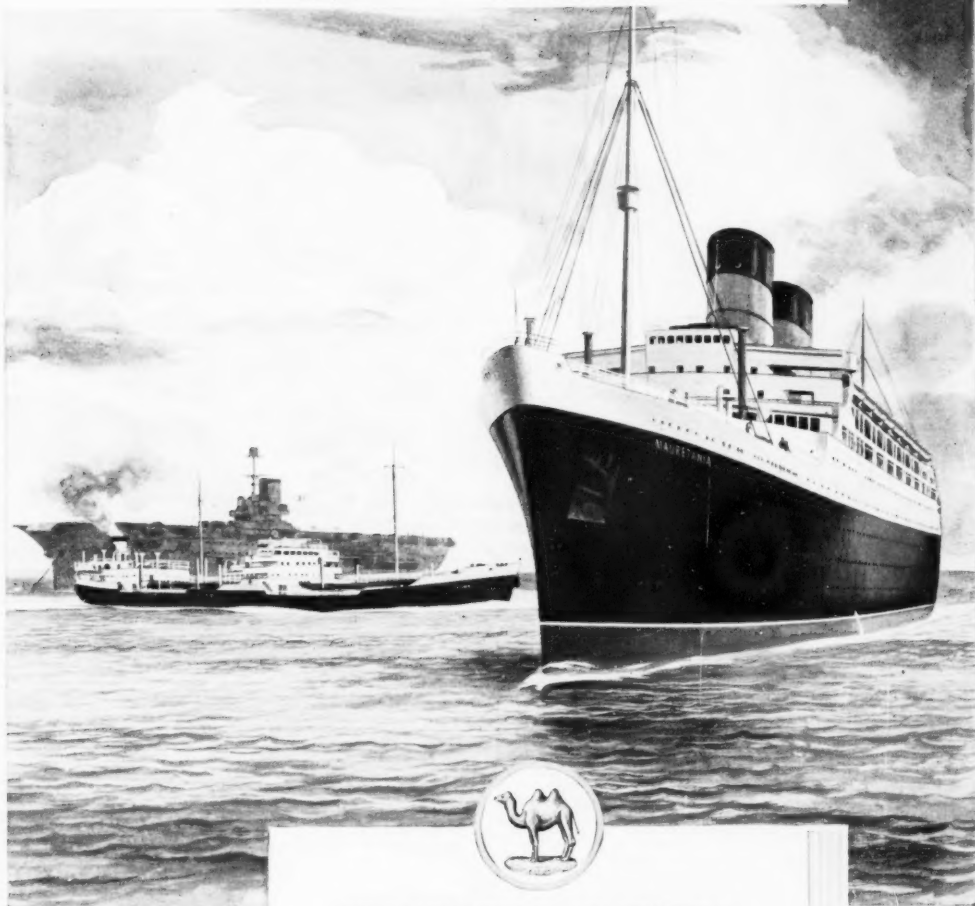
Telephones: 20581 - 2 - 3

Telegrams: HALBROS



# CAMMELL LAIRD

& CO. LTD. · BIRKENHEAD



SHIPBUILDERS · ENGINEERS  
BOILERMAKERS · REPAIRERS